Clinical Lectures
ON
CASES OF DIFFICULT DIAGNOSIS.

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LECTURE VII.

ON GASTRIC AND PERIGASTRIC ABSCESSES.

GENTLEMEN,—We have hitherto been considering abscesses communicating with the intestinal canal, but in order to complete our survey of the whole subject of abscesses opening into the digestive tube, we must now turn our attention to those connected with the stomach. It will, however, in order to gain a clear idea of these affections, be necessary for us first to consider separately gastric and perigastric abscesses. The former are situated in the walls of the organ, and may or may not open into it; the latter are in the neighbourhood of the viscus, and communicate with it by an opening through its coats, or are the result of ulcerations in its interior. Gastric abscesses may present themselves either as a purulent infiltration or as a localised collection of pus in the coats of the stomach. The former have been occasionally observed as an accompaniment of an acute infectious disorder, more especially in puerperal cases, and under such circumstances they probably result from the absorption of pus. The latter are also very rare, only thirty-one cases of both forms having been recorded; but as some instances have fallen under my own observation, it is probable they are not so uncommon as is generally represented. In the cases I have seen there has been always thickening of the walls of the stomach, either by malignant disease or as the result of previous inflammation; the pus has been situated in or near the newly-formed structure, and the mucous membrane has presented numerous small openings through which the pus could be readily squeezed. We occasionally meet with patients who assure us that they have been suddenly relieved of epigastric pain by the vomiting of pus, but considering how easily mistakes may be made between pus and other secretions, we are not justified in accepting such statements as evidence of a gastric abscess. Leube, after an examination of the various recorded cases of gastric abscess, has laid down the following as the symptoms of the disease. "In the midst of perfect health, or after a period of general malaise, the individual is seized with pain in the stomach and vomiting, accompanied by thirst, dry tongue, small, frequent, and irregular pulse, meteorism, and diarrhœa; subsequently delirium and prostration ensue, and finally death."[1] Now, unfortunately, in the cases I have seen there were no symptoms pointing to any change in the condition of the patient that would lead us to suspect an abscess of such an important organ. The following is the last case that has fallen under my notice.

CASE 1.—A man of middle age was admitted into the hospital with the ordinary symptoms of acute pneumonia. His wife stated that he had been unable to work for the last three years, on account of gradually increasing debility, and that he had daily vomited a quantity of clear fluid, but had not been in the habit of vomiting his food. On post-mortem examination, in addition to the pneumonia, the pylorus was found to be greatly thickened, and the stomach somewhat, although not excessively, dilated. There was a small ulcer, apparently of recent formation, near the pylorus, at a part where the coats were extremely thin and wasted, the rest of the mucous membrane in that region having a tough, fibrous appearance. In the thickened pylorus there was a collection of pus which could be easily squeezed through numerous minute holes with which the mucous membrane was perforated.

Now in this case there was no complaint on the part of the patient of any pain in the epigastrium, and it was only after his death that we were informed of his previous impaired health. In the other cases I have seen there has been a similar absence of well-marked signs of suppuration, and we may, I think, seek for an explanation of this in the rapidity with which the pus makes its way through the numerous small openings that form in such cases in the mucous membrane of the stomach.

Abscesses occur in the left hypochondrium and epigastrium independently of any irritation in the stomach, or of a communication with that organ. Thus you will occasionally see them arising from a suppurating hydatid cyst, more rarely as the result of tubercular peritonitis, or from irritation set up in the liver, spleen, or kidneys. But the form of perigastric abscess to which I propose to limit my remarks is that which either commences in the stomach, or which afterwards forms a communication with that viscus. The following case which was admitted under my care will show how obscure the affection frequently is, and how very difficult it may be to recognise it.

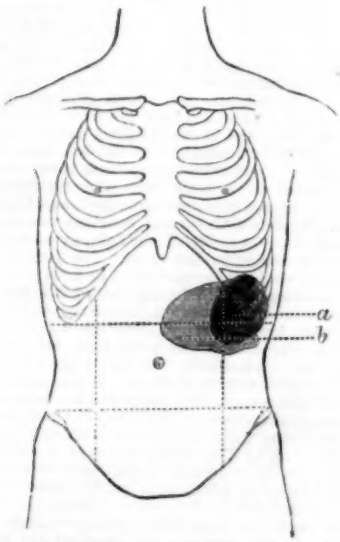
CASE 2.—A man, aged thirty-eight, was admitted Jan. 31st, 1881. He was a weaver, and had enjoyed good health until "some time ago," when he began to suffer from indigestion, the food appearing to lie heavy on his stomach and producing great pain. He stated that he had suffered from an injury to the back, but its nature and the date are not mentioned in the notes, and he evidently did not attach any importance to it. He never had syphilis. On admission, he had an anxious expression and complained of very severe pain in the left hypochondrium, extending backwards round the left side as far as the spine. All this region was very tender on percussion, the most tender spot being opposite the tenth and eleventh ribs. He was unable to lie on his right side, so that he constantly lay on the left side, with the neck bent forwards and his knees drawn upwards. Pulse 90; temperature 99°. He had no appetite, the tongue was thickly furred, and the bowels obstinately confined. The liver dulness extended from the fifth costal interspace to below the ribs, and it was slightly tender on pressure. Abdomen generally resonant. In the left hypochondrium, dulness on percussion extended upwards to the heart's apex, and downwards to a level with the umbilicus. Chest normal. The heart's apex was not raised, and there were no murmurs. On Feb. 10th he had constant vomiting, and he complained of the severity of the pain, extending from the left hypochondrium to the spine; the breath was very offensive; he could take no food; the pain was increased directly he attempted to take any food, but it was also continuous, and increased at night, preventing sleep. The recti muscles were hard and rigid. On the left side near the spine there was dulness on percussion, but no increased pulsation, and no murmur. He had constant nausea, increased even after a drink of water. It is noted on Feb. 15th that a hardness could be felt below the left hypochondrium, and an elongated dulness on percussion in the left hypochondrium, measuring three inches longitudinally by six laterally. (See Fig. 1.) The lower border of the liver was also remarked scarcely to descend on full inspiration; there was also some dulness on percussion, and increased resistance to pressure immediately above the umbilicus. The man continued in much the same state until April 22nd. The pain was excessive and constant, and required the use of subcutaneous injections of morphia frequently in the day. He had steadily lost flesh, and was then only 6 st. 12 lb., having weighed 8 st. on admission. The temperature varied from 98° to 100° during February, but rose to 102° in March, and afterwards oscillated until April 22nd, at which date it rose to 103°, and the patient complained of great pain at the base of the lungs behind, although neither dulness nor friction sounds could be discovered. On the 27th, he had a severe rigor, the temperature rising to 106°; but the pain in the left side was not more severe than usual. The left chest was now found to be dull on percussion, with absence of breath sounds, diminished vocal and tactile fremitus, but no friction sounds could be heard. On the 29th he had severe and general sweatings, the dulness was much increased in the left hypochondrium, but the tenderness was not increased, and the pain had diminished. Friction sounds were first discovered on May 2nd near the apex of the heart; rigors recurred from time to time, and a herpetic eruption showed itself on the lips, palate, and roof of the mouth. After this period the appetite began to improve, the pain decreased, and his weight remained stationary. On May 12th friction sounds could be heard over the whole left hypochondrium, where there was formerly such marked dulness on percussion, the dulness at the back of the lung slowly diminished, and the pain gradually lessened, until it only came on after food. From

1. Ziemssen's Cyclopædia of the Practice of Medicine, vol. vii., p. 161.

this time he rapidly improved, the pain entirely left him, the appetite returned, and he gained (so the notes state) as much as six pounds in weight in a single week. On June 22nd he was discharged, after being in the hospital five months, and at that time there was no dulness at the base of the lung and no friction sounds; there was some fulness under the left hypochondrium, but the part was tympanitic on percussion.

There must, of course, be always a certain amount of doubt about any case in which a post-mortem examination has not confirmed the accuracy of the diagnosis, but by taking into consideration the termination as well the course of the disease we may in most instances arrive at a correct decision. In the foregoing case it will be necessary for you to bear in mind that the patient had suffered from symptoms of gastric ulcer for some time before he entered the hospital; that on his admission the pain had become constant, although it was still increased by food; and, in addition to this, that an ill-defined tumour could be distinguished below the ribs, whilst on percussion a dull space was found both before and behind in the region of the stomach. He remained in this state for about three months, having lost a stone in weight, and the pain being so severe that the constant use of hypodermic in-

FIG. 1.



Plan of case of Perigastric Abscess. *a*, Part dull on percussion; *b*, part tympanitic on percussion.

jections was required to alleviate it. At the end of that time severe rigors ensued, accompanied by effusion into the left chest, although the pain did not increase, and no friction sounds were heard until ten days afterwards. After this he gradually improved, gained a stone in weight, and although the pain after food persisted for some time, it eventually disappeared. There was afterwards a friction sound to be heard in the left hypochondrium, where there had been formerly the dulness on percussion, but this also became gradually inaudible. Now this was clearly not a case of cancer, as was at first suspected, for there was no enlargement of the glands or liver, and the ultimate recovery of the patient negatives such a supposition. Neither was it an abdominal aneurysm, for you will remember it is stated there was neither a murmur nor pulsation, and the favourable issue is sufficient to disprove it. The undefined feeling of the tumour, and the dulness on percussion in front and behind, point to a collection of fluid rather than to a solid tumour, and this might arise either from a hydatid cyst or perigastric abscess. The former would not explain the pain after food, nor its persistence after the convalescence of the patient, whilst the latter seems to meet all the difficulties of the case. We shall afterwards find that this form of abscess chiefly occurs in chronic ulcers of the stomach, where adhesions have been formed, and you will observe that adhesions must have been present, for it is remarked in the notes that the liver did not seem to descend on full inspiration. The dulness, again, was clearly the result of an inflammatory exudation, for a friction sound could afterwards be heard in the locality where it was formerly detected. Then it is almost certain that perforation of the diaphragm occurred, and the pent-up pus made its way into the pleura, and this is a common accident in perigastric abscess. But in the diagram copied from the notes, you will remark there is a space in front of the dulness that was tympanitic on percussion, and you might suppose this was distended with gas, as is so common in perigastric abscess; but if such had been the case we should have had pneumothorax when the perforation occurred, so that the idea must, I think, be dismissed. You will, however, be able better to appreciate the probabilities of diagnosis being correct if we now discuss in greater detail the subject of perigastric abscess.

Perigastric abscess of the kind to which I have limited our inquiries is a very rare form of disease, for I have only discovered eight instances of it in the post-mortem records of this hospital. In all of these the walls of the abscess were formed by adhesions of the neighbouring viscera; in five ulceration of the stomach and in three a cancerous tumour were present; in one of the latter an opening had taken place through the abdominal walls. I have been able to collect only forty-four other cases from various authors, but I hope these will suffice to enable me to lay before you some of the chief circumstances connected with the disease.

When we were considering the subject of abscesses connected with the duodenum, we found that in a certain proportion their walls were formed of connective tissue; but it is evident that, from the complete investment of the stomach by the peritoneum, such is not likely to be the case with a similar affection of this organ. We consequently find that in the majority of cases the abscess was walled in by adhesions of the liver, spleen, or colon with the stomach, and that the pus was situated in front of this latter organ; in only four the abscess was situated behind it, in two it was placed in the right hypochondrium, and in three the ribs of the left side formed part of its walls. Of fifty-two cases, nineteen, or more than one-third, are stated to have been in contact with the diaphragm, and, as we shall afterwards see, perforation of this muscle is a common consequence of the disease. A foreign author has attempted to explain the frequency of this situation of perigastric abscess on the supposition that the distension of the intestines that always accompanies peritonitis pushes the pus upwards; but I think it is more probable that, as the perforation of the stomach usually occurs in its smaller curvature, the inflammation must necessarily generally commence in this locality, and where this is not the case, the upward movements of the diaphragm must tend to draw the pus upwards, whilst the descent of the muscle is unable to depress it on account of the adhesions that are already present between the contiguous organs. Occasionally the abscess is situated in the lesser omentum, but there are very few cases on record. It is worth while therefore to record the following.

CASE 3.—A man, aged forty-seven, was received into the London Hospital, under the care of Dr. Hughlings Jackson,[2] with a history of having suffered from pain of the abdomen for eight or nine years; he had never had hæmatemesis or vomiting of food. The day previously he was attacked with constipation, for which numerous enemata had been administered without effect. He complained of extreme pain over the abdomen and great dyspnœa, but died four hours after his admission.

Post-mortem examination.—"The mesentery attached to the upper part of the jejunum was covered over with puriform lymph; the upper and transverse parts of the meso-colon were also coated with lymph. On separating the colon an abscess was exposed lying in the cavity of the lesser omentum, bound in by the jejunum and colon and under the liver and back part of the stomach. The left end of the stomach was much thickened, and on opening the organ a large ulcer was found at the œsophageal end, near the lesser curvature and in the posterior wall. It was about an inch and a quarter in diameter, and had a firm grey floor, with round thick edges. At one spot it had perforated the coats of the organ and communicated directly with the abscess. The bronchi were filled with pus derived from the abscess."

[2] I beg most heartily to thank my colleagues who have so kindly placed the notes of their cases at my disposal.

Of fifty-one cases of perigastric abscess in which there is clear evidence as to the cause, six were associated with cancer, four with abscesses commencing externally to the organ, whilst forty-one were due to the irritation of simple ulcers.

You are well aware that gastric ulcers are more common towards the pyloric than the cardiac end of the stomach, but of nineteen in which the site of the ulcer coexisting with a perigastric abscess is recorded, eleven were at the cardiac and only eight at the pyloric end. Of sixteen in which the position of the ulcer is stated as regards the curvatures, thirteen were on the smaller and three in the larger; whilst three were on the anterior and five on the posterior wall. The unusual number of the ulcers in these cases at the cardiac end suggests the suspicion that the greater fixity of this portion of the stomach may be the reason why localised abscess was more prevalent in this situation than at the pylorus. This seems to be supported by the fact that adhesions, apart from those forming the walls of the abscess, are often mentioned as existing between the stomach and some of the neighbouring organs, and that very frequently the perforation had taken place at the point where the parts were thus united. Twenty-two cases of adhesion are recorded, and as no doubt this matter had often escaped observation, they were probably present in the greater number of those affected with this form of abscess. In some the small size of the perforation is expressly mentioned, and in five instances no communication could be found between the abscess and the ulcer, although they were in close proximity. The conclusion in such instances has been drawn that the perforation had healed after the formation of the abscess, but I would throw out the suggestion that in some of these cases there may have been an abscess originating in the coats of the stomach itself, which had set up suppuration by discharging its contents externally. There is another supposition worthy of consideration—viz., whether an inflamed ulcer of the stomach may not be able to set up suppuration in newly-formed tissue external to it, in the same way as we before found, in some of the cases of perinephritic abscess, suppuration was produced around a tubercular kidney, although the capsule of the organ remained intact. The following case seems to show that an abscess of this kind may also originate in pyæmia:—

CASE 4.—A man, aged forty-seven, was admitted under the care of Dr. Stephen Mackenzie. "Eighteen months previously he had suffered severe pain in the epigastrium, increased one hour after food; one month ago he was attacked suddenly with severe pain of the abdomen, having for two or three days before been greatly constipated. A mass the size of a cricket-ball was discovered on the left iliac fossa, which was nodular and painful on pressure; dulness on percussion and distant breath sounds were also found at the base of the left chest. A few days afterwards the abscess was opened and eight ounces of very fetid pus were evacuated. This was, however, followed by erysipelas, and as his breathing became difficult, the left chest was aspirated and forty ounces of pus removed."

Post-mortem examination.—It is stated that there "was contraction of the descending colon and an abscess in the abdominal walls," but the notes on this point are very scanty. "There was also an irregular contraction of the stomach around a point midway between the cardiac and pyloric ends, and at the base of this a circular depression where it was adherent to the left lobe of the liver. External to the adhesion, there was a small abscess below the stomach, left lobe of liver, and diaphragm. The stomach was much thickened around the ulcer, and an abscess the size of a hen's egg was situated below the capsule of the spleen. The left pleura contained pus."

You will observe here that the patient had suffered from symptoms of gastric ulcer for eighteen months, but the formation of pus, which was small in quantity, had in all probability only taken place lately. As it was accompanied by an abscess in the spleen and in the abdominal walls, and pus was also found in the left pleura, it is most probable that they were all due to a common cause—viz., to pyæmia resulting from the abscess in the iliac fossa.

When the state of the ulcer is mentioned, it is in all cases such as accompanies one of long duration, and in some the perforation is said to have taken place in the cicatrix of an old ulcer. The coexisting conditions of the organ itself point to the same conclusion. Thus, in four the stomach was much contracted, in three the coats were thickened, in two it is mentioned as dilated, in one there was narrowing of the duodenum, in one of the œsophagus, and in three of the pylorus.

The facts we have now ascertained will, I think, suffice to show under what circumstances a perigastric abscess is most likely to take place—viz., when adhesions have occurred between the stomach and some of the neighbouring organs, and the ulceration either proceeds very slowly to the surface, or the perforation is so minute that only a very small portion of the gaseous or liquid contents of the organ finds its way into the space limited by the adhesions. Such conditions are of course most likely to occur when the coats of the organ have been thickened by long-standing disease, and when the ulceration is situated at some place that can most readily contract adhesions to the neighbouring parts. In thirty-four of the cases collected the pus eventually made its way either into the cavity of the chest through the abdominal parietes or into one of the neighbouring organs. When you remember the power of the gastric fluid of digesting animal substances, you will be tempted to ask whether this unusual tendency to perforation of the neighbouring structures may not be partly the result of the contents of the abscess being in communication with the interior of the organ. In support of this one case may be quoted in which no remains of the pancreas could be discovered, its site being occupied by the pus; and in two others the opening of the stomach into the pleura is stated to have been very large. But, putting aside these cases, there is not much evidence in favour of such a supposition, for the openings into the stomach are generally recorded as being very small, and no appearances similar to those of post-mortem digestion have been noticed. This probably arises from the fact that the communication between the stomach and the sac was not very free, or the whole contents of the latter would have been discharged through the canal. As a consequence of this, little or no gastric juice would become mixed with the pus, and thus the vitality of the neighbouring structures would be a sufficient protection. It is, however, evident that in cases of this kind there is a great tendency to decomposition, arising probably from the entrance of gas and other products of fermentation from the stomach, for the pus is usually described as "ichorous"; in three instances the spleen was found to be greatly softened, in six there was pneumonia, and in two there was also gangrene of the lung.

We before found that the greater number of perigastric abscesses were in immediate contact with the diaphragm, and it is therefore not surprising that the cavity of the chest has been more frequently perforated than any other part. This occurred in twelve of those I have collected, and where there was a communication with the stomach of course both air and fluid were present in the pleura, but in cases, such as we have before seen sometimes occur, where there was no direct opening into the organ, pus alone was met with. Occasionally adhesions had taken place in the pleura, dividing it into separate compartments filled with pus; but this was a very unusual condition. You will remember that we remarked in a former lecture that perinephritic abscesses were also liable to perforate the diaphragm, and it will naturally strike you as strange that this should be so common in abdominal abscesses; whilst, as you know, perforation from the chest into the abdomen is unusual. The reason of this difference I believe to be that in empyema the fluid has a ready means of escape by perforation of the lung or the intercostal spaces, whilst in the abdomen it is pent up by adhesions, and closely surrounded by organs with thick and vascular coats. But empyema was also sometimes present even where perforation of the diaphragm was not discovered; and the most reasonable explanation of this is that some of the contents of the abscess were absorbed by the lymphatics of the diaphragm, which, as you are aware, are very large and active in this structure. Considerable difference existed as to the liability of the sides of the chest to perforation, it having been recorded in ten cases on the left, and in only two on the right side; but this, of course, arises from the greater number of abscesses being situated in the left side of the abdomen.

I have only found three cases in which perforation of the pericardium took place, the entrance of the fluid, of course, setting up sudden and violent inflammation of the membrane.

In twelve cases perforation of the abdominal parietes is recorded, the pus being discharged externally, and leaving a communication between the surface of the body and the stomach. Seven of these seemed to have originated in

gastric ulcer, one in cancer, whilst in four the abscess commenced outside the stomach, but afterwards perforated its coats. This termination of perigastric abscess is extremely rare, and many seem to have been placed on record only because they are so uncommon. I find the following example in our post-mortem books, but I have been unable to obtain any history of the patient during her life.

CASE 5.—The patient was a female, aged thirty-five, admitted under the care of the late Mr. Maunder. "An incised wound to the right of the umbilicus communicates with a large sinus-like cavity. Beneath the left lobe of the liver, and in front of the stomach, is a quantity of reddish grey, juicy substance, which looks like encephaloid cancer. On a level with the incised wound the abdominal wall is adherent to the omentum, and this firm adhesion encloses the liver, stomach, and upper part of the duodenum in one cavity. The colon is empty and does not communicate with it. The small intestines are normal. A bougie is seen to pass from exteriorly into the stomach at the pyloric extremity, and this fistulous opening admits the introduction of a finger, so that the contents of the stomach must have escaped out of the abdominal walls. The pyloric end is invaded by cancerous masses, its surface being irregular and ulcerated. Close to the pylorus, at the greater curvature, the walls of the stomach are absent, having been completely destroyed by the cancerous ulceration, and it is here that the external opening communicates with the organ. A little to the right of the opening the stomach is contracted by firm fibrous thickening, and only admits two fingers. The glands along the spine are cancerous."

The foregoing is a good illustration of the terrible destruction often wrought by gastric cancer; but, as a rule, the formation of an abscess is not common, the morbid growth tending to invade and consolidate the neighbouring structures, instead of inducing suppuration. Still, you must remember that the formation of pus does occasionally occur, for I lately diagnosed tubercle of the peritoneum chiefly on the ground of the presence of an abscess under the abdominal walls, but post-mortem examination showed I was wrong, and that it was the result of malignant disease.

Perforations are noted as having occurred into most of the neighbouring hollow organs; thus in one instance the stomach, duodenum, and colon communicated with the same abscess, in seven there was an opening into the colon, in one into the small intestine, and in one into the gall-bladder. In eleven there was more than one ulceration in the stomach, and in some instances more than one ulcer opened into the same abscess. The sex was recorded in forty-one cases of perigastric abscess arising from ulcer, and of these twenty-five were females. Dr. Brinton concluded from his inquiries that females were twice as liable as males to gastric ulcer, so that if we can trust to so small a number of cases as I have collected, males are more apt to have epigastric abscess than the weaker sex. The ages are given in thirty-seven cases of perigastric abscess, and I have compared in the following table the percentages at different ages with those given by Dr. Brinton of 226 cases of gastric ulcer.

	Under 20.	20 to 40.	40 to 60.	Above 60.
Percentages of gastric ulcer	9	37	31	23
Percentages of perigastric abscess	19	56	19	6

You will here see the greater proportion of cases of perigastric abscess in the earlier period of life, when the vital powers are strongest, and when there is, therefore, the chief tendency to adhesive inflammation, the greatest number occurring between twenty and forty, and very few presenting themselves after sixty years of age. It seems to point to the same conclusion at which we before arrived—viz., that the main predisposing cause of the disease is the formation of adhesions which, in case of perforation, prevent the escape of the contents of the stomach into the general cavity of the peritoneum.

(To be concluded.)

COLONIAL LEGISLATION FOR THE HABITUAL DRUNKARD.—In his address as chairman at the British and Colonial Temperance Congress, at the Princes Hall, this week, Dr. Norman Kerr stated that in Canada, South Australia, Victoria, and New Zealand, the habitual drunkard could be placed under care and treatment and restraint against his will. In this respect the Colonies were far ahead of the mother country. Colonial legislation was permanent, and not temporary, as at home.

EXCISION OF THE COCCYX.

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THE following two cases which have recently occurred in my practice illustrate the advantages under certain circumstances of excision of the coccyx.

CASE 1.—X. Y——, aged fifty-nine, male, has for the last twelve years suffered from distressing pain in the seat. He has consulted various surgeons both in London and in the provinces, but without obtaining relief, and his various advisers had failed to diagnose any sufficient cause for his symptoms. I was asked to see the case with Dr. Livy, of Bolton, the patient's private medical adviser, who told me that the case was one of ischio-rectal abscess suspected to be associated with some diseased condition of the coccyx. An examination confirmed this opinion, and I determined to cut down upon and investigate the condition of the parts. This I did two days after first seeing the patient. An opening which had been previously made into the abscess, above and just within the right tuber ischii, was freely enlarged, and a sinus leading into the rectum just above the internal sphincter was laid open. A second sinus was now found, which, on exploration with the finger, was ascertained to lead to a necrosed coccyx. An incision was then made immediately over that bone in the middle line, and through it were removed the last three segments. The wounds were thoroughly scraped so as to remove all unhealthy granulation tissue, and they were then plugged with iodoform gauze. Immediately after the operation, the temperature, which had previously ranged as high as 105°, fell to the normal, and never again rose above 100°, at the same time the general health of the patient improved rapidly. The pain from which he had previously suffered disappeared at once, and has not returned, and the wound healed well and rapidly.

CASE 2.—E. R——, aged thirty-seven, male, on consulting me, gave the following account of himself. His occupation is that of a piano dealer and tuner. For the last fifteen years he has been subject to attacks of pain, at first infrequent, at intervals of about a month, and not very severe; latterly these attacks have been as frequent as once or twice weekly, and his pain has been much more severe. The pain is always brought on by the commencement of the act of defecation and is in the region of the anus; when it occurs he has severe tenesmus and a desire to further empty the bowel, the pain meanwhile increasing in intensity, and often detaining him in the closet for two hours at a time. After such an attack more or less pain will remain throughout the day, and even during the whole of the following night. He can suggest no cause for the origin of these symptoms, except that he has always had a tendency to constipation. Some time since, however, he fell and struck the coccyx against a piano, but this appears to have been subsequent to the onset of the disease. He has hitherto found a certain amount of relief from the use of a warm sitz-bath, but this has not been of great efficacy, and all other measures have proved futile. On examination and especially on pressure over the posterior part of the rectum, pain is caused exactly similar to that induced by defecation. Finding that the seat of the pain was apparently the coccyx, and discovering that bone bent at a right angle, and having the history of an injury, I excised it by a median incision, without opening the rectum. The parts healed at once, relief from pain was complete, and there has been no return since the time of the operation.

In addition to these two cases in males, I had under my care, about ten years ago, five cases of coccygodynia in females, all produced by injury during parturition, and in all of which I removed the coccyx, with immediate and complete cure of the disease.

The treatment of coccygeal pain falls under three heads—viz.: 1. By means of rest and anodynes. 2. By complete or partial separation of the bone from its muscular connexions. 3. By excision of the bone. As in other cases, our method of treatment must always be guided by the nature of the case. Thus in those where the pain is due to hysteria or to reflected irritation, owing to uterine or ovarian disease, it would obviously be unsurgical to remove the coccyx. There are, however, a large number of other cases, in which surgical interference will probably be required, and which may be

arranged under the following heads: Old fractures and dislocations, in which the bone has become fixed in a faulty position, either that of flexion or of extension; congenital elongation of the coccyx; necrosis, whether traumatic or otherwise; tumours connected with the coccyx; and, finally, a large group of cases of obscure pathology, in some of which there appears to be periostitis of some or all of the segments, in others inflammation of the sacro-coccygeal joint.

In an old fracture or dislocation with displacement, we can hope for no improvement apart from operation, and here also Simpson's operation of separation of the attached muscles cannot be expected to succeed in relieving the patient. Skey[1] attempted to remedy an old dislocation backwards with consequent extreme flexion of the coccyx, by means of traction made by passing a loop of wire over the apex of the bone and connecting this loop with a splint attached to the spine; but the pain produced by this method was so great that it had to be abandoned. It might appear possible in such cases to separate the displaced bone at its abnormal angle, and endeavour thereafter to retain it in position by a plug introduced into the rectum, but the difficulty of preventing a return of the displacement must necessarily be great, if not insuperable. Hence in such cases I should advise excision of the bone.

Further, if congenital elongation be a cause of pain, removal of the part is clearly indicated. So also in cases of necrosis, as in the first of my patients, we are following the ordinary surgical method in removing the sequestrum. Cases of tumour involving the coccyx must be treated on general surgical principles. But it is in cases where there is no obvious lesion that there is the greatest room for diversity of opinion as to the method of treatment to be adopted. Here we would naturally try, before resorting to operation, the effects of rest and of the various anodynes. But if this treatment should fail, as it had done in my cases before they came under my observation, what is to be done? Hilton recommended separation of the fibres of the sphincter ani from the apex of the bone, and thus undoubtedly made possible more perfect rest. Simpson went further and completely divided the muscular connexions of the coccyx by means of subcutaneous section, and he was thus able to cure a considerable number of cases. But he himself admits that in some instances this operation was insufficient, and he then resorted to the procedure, which had long before been advocated by Nott, of removal of the coccyx. In nearly all cases the latter method seems to have effected a cure, and I should therefore be inclined to adopt it at once, instead of running the risk of wasting time by the subcutaneous isolation. The operation of excision of the coccyx is sufficiently simple and without danger: it is more easily performed than the subcutaneous division of muscles; its result is apparently universally good, providing that the diagnosis be correct; and the loss of the bone does not seem in any case to have caused inconvenience. On these grounds, therefore, I would advocate excision in all cases of coccygeal pain where non-operative treatment has failed to give relief, unless the pain be due either to some constitutional condition as hysteria, or to some reflex influence as in uterine and ovarian disease.

Manchester.

SIXTY CASES OF SCIATICA TREATED BY GALVANISM.

BY W. E. STEAVENSON, M.D. CANTAB., M.R.C.P.,
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SINCE publishing my paper in THE LANCET of Jan. 19th, 1884, on the Use of Galvanism in Sciatica, I have had sixty cases under treatment, and the results have borne out the hopes I then entertained as to its efficacy. I have therefore thought that the details of these additional cases might be interesting to the profession. I only purpose to give a very short account of each case, embodying the most important points. I gave a description of the mode of applying the current in my former paper.

CASE 1.—Jan. 24th, 1884. A lady, aged fifty, sent to me by Sir James Paget. Had suffered for five weeks. Galvanised eleven times. Was greatly relieved, but not cured. Had suffered from uterine displacement, and had been wearing a pessary up to the time of the commencement of the treatment for sciatica. This lady had a subsequent attack of sciatica, and was again relieved by galvanism after trying many other remedies.

CASE 2.—Jan. 26th, 1884. M. W——, female, aged thirty-five. An in-patient of the hospital. Had been ill for three months. Was galvanised about ten times. Cured.

CASE 3.—Feb. 11th, 1884. W. C——, male, aged thirty-three. An out-patient. Had been ill six months. Galvanised four times. Cured.

CASE 4.—Feb. 13th, 1884. M. M——, female, aged thirty-eight. An in-patient. Had been ill four months. Galvanised four times. Cured.

CASE 5.—Feb. 22nd, 1884. J. L——, male, aged fifty-eight. An in-patient. Had been ill six weeks. Galvanised five times. No improvement. On examination per rectum, a tumour was felt pressing on the side on which there was sciatica. After death necrosis of the tuber ischii was discovered. This was therefore not an ordinary case of sciatica.

CASE 6.—Feb. 28th, 1884. W. B——, male, aged twenty-four. An out-patient. Had been ill for ten weeks. Galvanised four times. Cured.

CASE 7.—May 12th, 1884. A. C——, male, aged twenty-three. An out-patient. Ill eight months. Galvanised four times. Cured.

CASE 8.—July 11th, 1884. L. W——, female, aged forty-two. An out-patient. First attack. Had been ill three weeks. Galvanised eight times. Cured. (Some of the out-patients do not return to report themselves when they are well. If no note has been made of their improvement we are doubtful as to the result. In several cases mentioned in this list I have had to go by the note last made. If to the effect "much improved," I have considered their ceasing to attend as evidence of being cured.)

CASE 9.—July 22nd, 1884. C. S——, male, aged thirty-one. An in-patient. The sciatic nerve was stretched on account of the man being subject to epileptiform convulsions. The operation was followed by sciatica and suppuration along the course of the nerve. Galvanised once. Improved.

CASE 10.—Aug. 11th, 1884. A. P——, male, aged twenty-three. An out-patient. Had been ill four weeks. After the third application of electricity he was much better. It appears by the register of cases that he was galvanised twenty-five times. He was quite well when I discharged him; how long he had been so I cannot say. Many of the patients continue coming twice a week for as long as they can. They say they feel so much better for the galvanising, and they think that it strengthens their nerves.

CASE 11.—Aug. 11th, 1884. C. H——, male, aged forty-five. An out-patient. Ill seven weeks. Second attack. Galvanised six times. Cured.

CASE 12.—Aug. 15th, 1884. E. C——, female, aged forty-one. An out-patient. Ill four months. Galvanised eleven times. Cured. The galvanising brought on menstruation.

CASE 13.—Sept. 2nd, 1884. Miss E. S——, aged thirty-one. Had had sciatica for two months, which necessitated deferring her wedding. Galvanised four times. Cured.

CASE 14.—Oct. 20th, 1884. J. O——, male, aged twenty-six. An out-patient. Ill five months. Had been in bed six weeks. Only attended once. Returned some few months afterwards (with another patient), and said that the first application of electricity had cured him.

CASE 15.—Oct. 27th, 1884. J. G——, male, aged twenty-nine. An out-patient. First attack. Had been ill five months. Only attended once. Came from Richmond.

CASE 16.—Nov. 16th, 1884. G. B——, a gentleman sent to me by Mr. Alfred Cooper, aged about fifty. Had been in pain for two weeks. Galvanised once. Cured. On the 15th of the following month he had a return of pain. Galvanised twice; cured.

CASE 17.—Nov. 18th, 1884. J. P——, a gentleman sent to me by Mr. Butlin, aged about forty-two. Had had sciatica for five months. Galvanised eight times. Not cured. (See subsequent note.)

CASE 18.—Nov. 21st, 1884. A. J——, male, aged forty-three. An out-patient. Had been ill for twelve months. Galvanised seven times. Cured.

CASE 19.—Nov. 27th, 1884. E. D——, male, aged forty-five. An out-patient. Had been ill two months. Second attack. Only attended once.

CASE 20.—Nov. 27th, 1884. T. N——, male, aged twenty-nine. An out-patient. Had been ill five weeks. First attack. Galvanised eight times. Much improved.

CASE 21.—Nov. 29th, 1884. C. S——, a gentleman, aged

[1] THE LANCET, 1861, vol. ii., p. 326.

about twenty-nine. Had been ill for a few days. Second attack. Galvanised twice. Cured.

CASE 22.—Dec. 2nd, 1884. M. M——, female, aged twenty-seven. An in-patient. Had been ill five months. Was of a hysterical temperament. Treated by statical electricity. Sparks taken from over the course of the sciatic nerve. Application about eight times. Cured.

CASE 23.—Dec. 4th, 1884. A. F——, male, aged thirty-six. An out-patient. Ill seven weeks. First attack. Galvanised fifteen times. Cured.

CASE 24.—Dec. 29th, 1884. J. E——, male, aged fifty-five. An in-patient. Ill eleven weeks. Galvanised several times. Improved.

CASE 25.—Dec. 29th, 1884. G. N——, male, aged thirty-six. An in-patient. Had been ill for two months. Was in Luke ward for six weeks, and treated by electricity. Was not cured. Was made an out-patient on Feb. 9th, 1885. Galvanised fifteen times. Cured.

CASE 26.—Jan. 8th, 1885. A. M——, male, aged thirty-four. An out-patient. Sent to the hospital by Dr. de Havilland Hall. Had been ill ten weeks. Galvanised twelve times. Cured.

CASE 27.—Jan. 12th, 1885. R. B——, male, aged fifty. An out-patient. Fourth attack of sciatica. Had been ill two months. Galvanised fifteen times. Cured.

CASE 28.—Jan. 21st, 1885. M. C——, female, aged twenty. An in-patient. Had been ill for three months. Was galvanised in the hospital a large number of times. Improved. Was made an out-patient. Galvanised seven times. Cured.

CASE 29.—Feb. 19th, 1885. A. B——, male. An out-patient. Had been ill two weeks. Galvanised twice. Did not attend after the second time. No note as to whether improved or not.

CASE 30.—Feb. 19th, 1885. G. S——, male, aged thirty-four. An out-patient. Had been ill four weeks. Galvanised ten times. Was better.

CASE 31.—Feb. 26th, 1885. J. H——, male. An out-patient. Had been ill seven months. Galvanised fourteen times. Cured.

CASE 32.—May 7th, 1885. L. D——, male, aged twenty-eight. An out-patient. A policeman. Had been ill for six months. Had been an in-patient of the hospital, and had had his sciatic nerve stretched by forcible flexion, with only temporary improvement. Galvanised eight times. Cured.

CASE 33.—May 8th, 1885. E. C——, female, aged forty-nine. An out-patient. Had been ill for nine months. Galvanised four times. Improved. Ceased attending.

CASE 34.—June 4th, 1885. T. A——, male, aged forty-five. An out-patient. Second attack. Started with a sneeze. Had been ill two weeks before applying at the hospital. Has been galvanised twenty times. Was much improved after sixth application. Has now ceased to attend. The last time he came he said he had been free from pain for a week, but felt it slightly on that day.

CASE 35.—June 11th, 1885. G. T——, male, aged twenty-seven. An in-patient. Underwent an operation for fistula in ano, followed by sciatica. Galvanised eight times. Cured.

CASE 36.—June 24th, 1885. A. D——, a gentleman, aged about thirty. Had been ill for three weeks. Galvanised nine times. Once faradised. Cured. (This patient expressed himself as cured when he discontinued treatment; I afterwards heard that he had a return of his pain, which was relieved by a visit to Aix-les-Bains.)

CASE 37.—July 2nd, 1885. J. A——, male, aged fifty-nine. An out-patient. Had been ill a month. Galvanised ten times. Result not stated.

CASE 38.—July 17th, 1885. A. K——, male, aged thirty-six. An in-patient. Had been ill five weeks. Galvanised ten times. Cured.

CASE 39.—July 21st, 1885. M. H——, female, aged sixty. An in-patient. Had been ill two weeks. Was galvanised. This patient was cured of her sciatica, but in the notes of her case the result is credited to the exhibition of chloride of ammonium.

CASE 40.—July 27th, 1885. A. S——, male, aged forty-seven. An out-patient. Had been ill for five weeks. Galvanised twice. Ceased attending. Result not known.

CASE 41.—Aug. 10th, 1885. An American gentleman, aged sixty-five, sent to me by Mr. Savory. Had been in pain about a week. Second attack. The first attack had been cured by Duchenne with galvanism. Galvanised four times. Cured.

CASE 42.—Aug. 13th, 1885. G. R——, male, aged twenty-six. An out-patient. Has been ill for six weeks. Galvanised five times. Cured.

CASE 43.—Aug. 20th, 1885. E. J——, female, aged twenty-nine. An in-patient. Had been ill for two months. Galvanised five times. Cured.

CASE 44.—Aug., 1885. A member of the surgical staff of the hospital. Had suffered from sciatica for about a fortnight. Galvanised once. Cured.

CASE 45.—Sept. 24th, 1885. J. G——, male, aged forty-one. An out-patient. Had been ill for three months. Galvanised once. Did not return. Result uncertain.

CASE 46.—Oct. 5th, 1885. E. G——, male, aged seventy. An out-patient. Had been ill for three months. Galvanised twelve times. Improved.

CASE 47.—Oct. 23rd, 1885. M. B——, female, aged thirty-two. Had suffered more or less from double sciatica for two years. Pain in right thigh relieved after six applications of electricity, but it returned again about Christmas-time. Pain in left thigh relieved by four applications.

CASE 48.—Nov. 12th, 1885. M. W——, male, aged thirty-three. An out-patient. Had suffered from sciatica for two years. Galvanised thirteen times. Improved.

CASE 49.—Nov., 1885. A lady, about thirty. Had had sciatica for six weeks. First attack. Galvanised five times. Improved. Left town for the country before she was quite cured.

CASE 50.—Nov. 19th, 1885. C. H——, male, aged forty-two. An out-patient. Galvanised seven times. Cured.

CASE 51.—Nov. 30th, 1885. C. W——, male, aged thirty-seven. An out-patient. Had had sciatica for two weeks. Galvanised eight times. Cured.

CASE 52.—Dec. 21st, 1885. J. L——, male, aged forty-two. An out-patient. Had been ill for five months. First attack. Galvanised four times. Result not stated in notes.

CASE 53.—Dec. 22nd, 1885. M. B——, female, aged twenty-eight. Out-patient. Had had sciatica for six months. Confined a month ago. Galvanised four times. Cured. Came twice afterwards for treatment, as she said she felt so much better for the galvanising.

CASE 54.—Jan. 1st, 1886. R. F——, female, aged forty. Sent to me from the General Post Office. Had been ill three months. Galvanised ten times. Cured.

CASE 55.—Feb. 8th, 1886. G. B——, male, aged thirty-six. An out-patient. A fourth attack. Galvanised eleven times. Cured.

CASE 56.—Feb. 25th, 1886. T. T——, male, aged thirty-four. Out-patient. First attack. Had been ill for twelve months. Galvanised twice. Result not stated.

CASE 57.—March 1st, 1886.—A. W——, male, aged forty-five. Out-patient. Had been ill eight months. Galvanised seven times. Cured.

CASE 58.—April 1st, 1886. J. N, a gentleman aged sixty-one, with an enlarged prostate (? malignant). Had had pain down the course of the left sciatic nerve for five weeks. Galvanised seven times. Relieved so as to enable him to leave town for the seaside.

CASE 59.—April 8th, 1886. R. G——, male, aged fifty-six. An out-patient. Third attack. Had been ill this time for eleven weeks. Galvanised three times. Improved. Is still attending.[1]

CASE 60.—April 15th, 1886. J. R——, male, aged fifty-three. An out-patient. Had been ill four weeks. Galvanised once. Is to attend again.[1]

The above sixty cases have been more or less under my care. Thirty-seven have been cured; one had a return of sciatica and was cured a second time; eleven improved only; two did not improve; concerning nine, I am uncertain as to the result; and two are still attending the hospital.[1] Of those that recovered, three cases were cured with one application, two required two applications only, seven cases were galvanised four times each, two were galvanised five times, one case required six times, four cases seven times, five cases eight times, one case nine times, four cases ten times, two cases eleven times, one case twelve times, one case fourteen times, and three patients came fifteen times before they were satisfied that they were cured; one patient escaped my observation, and managed to get one or other of the students to galvanise him twenty-five times before I stopped his coming; he had been free from sciatica for several weeks. Of the cases which were not successful, one patient was, after death, discovered to have extensive necrosis of the ischium, with a sequestrum of dead bone. Another, a lady, was at the time suffering from some malposition of the uterus, which was tilted over on to the side in which the

[1] April 15th, 1886.

pain was felt, and no doubt exercised some pressure on the roots of the nerve. Although in this case the sciatica was not cured, the patient was so much benefited that she was able to get about the house again after eight applications. Before electricity was tried she had been confined to her bed for five weeks. With regard to the second unsuccessful case, I cannot well assign a reason for its non-improvement. The patient was a gentleman who had spent many years in the East Indies, and had suffered from dysentery and ague. He attended and was galvanised eight times, and as he was not then free from pain he did not care to continue the treatment. He tried several remedies afterwards, with the same unsatisfactory result. Perhaps if he had persevered longer with the galvanism he might have been cured, for several of the hospital patients attended as many as ten or fifteen times before they were quite relieved; but there is more difficulty in obtaining the prolonged and regular attendance of a patient who has to pay for each application than of one who gets his treatment gratuitously. The cases included in my list bear out the favourable opinion expressed by Dr. Stone, in his recent Lumleian Lectures, of the action of electricity in the treatment of sciatica.

Welbeck-street, W.

A COLOUR CIRCLE FOR TESTING THE CHROMATIC SENSE.

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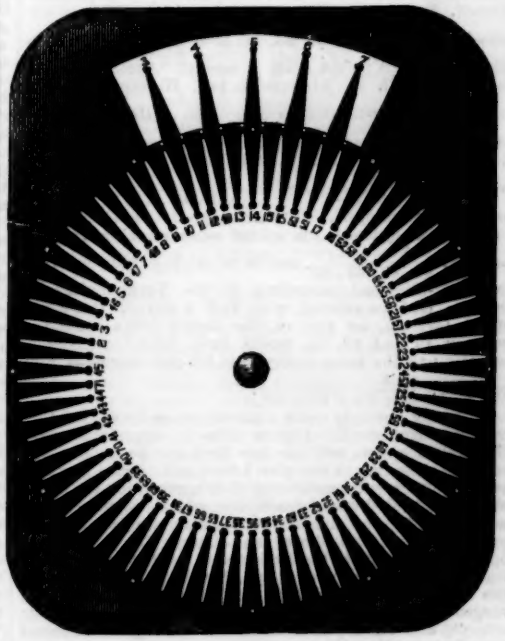
EVERY instrument which tends to simplify and render more easy the functional examination of the eye is a great boon to the ophthalmic surgeon, not only by enabling him to do his work with less fatigue, but by facilitating the conduct of inquiries upon a much larger scale than is possible when the means at his command necessitate complicated apparatus or a lengthy system of examination. These remarks specially apply to the perception of colours. Within recent years defects in the colour sense, whether congenital or acquired, have assumed an importance which can scarcely be over-estimated: the former chiefly in connexion with the recognition of lights and flags in the railway and marine services; the latter in connexion with the different forms of amblyopia dependent upon diseases of the optic nerves and the various parts of the brain which constitute the visual centres.

It is not my purpose here to discuss the various theories which have been advanced in explanation of the phenomena of colour perception, but to introduce to the notice of the profession a piece of apparatus which I have had constructed with a view to the rapid detection of errors in this direction. Most of the methods in general use are either too complicated or not sufficiently efficient. Holmgren's is, of all others, perhaps the most convenient, but, carried out with the detached skeins of wool, it is tedious in its application and requires a good deal of talking and explanation. The wools, too, require constantly remixing; they are apt to be thrown about or mislaid; and, withal, there is no ready method of keeping a record of the colours that have been erroneously selected by those who have a defective chromatic sense. This system therefore is ill-adapted for the out-patient department of a hospital. What is required is some instrument which, always at hand, can be rapidly and efficiently applied with the minimum loss of time, and these attributes I claim for my instrument. The principle is essentially that of Holmgren, but the application is somewhat modified for the sake of rapidity and convenience.

The instrument consists of a test board and a revolving colour disc. The disc consists of a white enamel tin plate twenty-two inches in diameter. Its margin is cut out or notched so as to form altogether 72 bobbins or winders to hold the skeins of different colours. The wool, when placed upon these winders, passes through an aperture which is situated opposite the centre of each notch; it thus assumes the form of a cone, the apex of which is directed towards the centre of the circle, the base occupying the extreme margin, as clearly seen in the annexed sketch, where the shaded cones represent the colours. The test board, which is fixed and immovable, consists of a segment of a circle, also enamelled, so placed that its concavity exactly fits the convexity of the disc. Winders to hold the test colours are let into this tin plate in the same way as upon the disc, but the bases of the cones are directed towards the concavity of the test-board, the apex outwards. In this way the base of any colour cone on the wheel can be placed in exact apposition with the base of any colour cone upon the test board, forming with it a figure of this form: $\frac{\Delta}{\nabla}$. The disc rotates upon its centre, and by means of a weak catch stops when the bases of the cones are exactly opposite the bases of the cones on the test board. The colours that have been selected for the test board are the colours of the spectrum: red, orange (yellow), green, blue, and violet; and purple has been added, with a view to enable the tests to be applied upon Holmgren's principle. The green is the pale green which represents his No. 1 test; the purple is the tint which represents his test No. 2; the red is the full red which represents his test No. 3; the blue is a pure saturated blue, neither inclining to red nor green; the violet is a pure violet, as near to spectral violet as can be obtained. These test colours are arranged upon the board and numbered



as follows (there is no No. 1 or No. 2, for reasons which will follow): No. 3, pale green; No. 4, purple; No. 5 red; No. 6, blue; No. 7, orange or yellow; No. 8, violet. Upon the circle there are in all 72 colours, and they are numbered as follows: 1 to 19 represent the lighter shades of confusion colours; 20 to 29 the darker greys and browns; 30 to 36, greens of various shades; 40 to 46, purples of various shades; 50 to 56, reds of various shades; 60 to 66, blues; 70 to 76, yellows and oranges; 80 to 86, violets. To scatter the colours and yet to preserve some kind of order, the numbers do not follow each other consecutively on the circle, but in the following order: 1, 10, 20, 30, 40, 50, 60, 70, 80[1] (which represent one of each of the series of colours); then Nos. 2, 11, 21, 31, 41, 51, 61, 71, 81 (which represent another series), and so on in succession; each series as much as possible representing darker shades as they progress towards the higher numbers. In this way no two colours of the same hue come together upon the circle, and they appear generally scattered, although really a definite order is preserved. Now, with this arrangement it is easy to register and keep a record of the colour defects a person who is

[1] By a mistake of the engraver the numbers are erroneously placed on the block.

examined may show; so that we may, as it were, subsequently examine him without his presence and study carefully his defects.

Let us now explain how the circle is used. A test colour (whichever is desired) is shown to the patient, and he is directed to look at it carefully, and then gradually and slowly turn the wheel until a colour which to his eye corresponds, although of a lighter or darker shade, comes immediately above it, and completes the figure which is formed by the junction of the two cones at their bases. When he is convinced of the correspondence, *he is to remove his hand completely from the wheel*, and the examiner then notes the number of the colour chosen. Now, in recording the cases, if we write down the number of the test as a numerator and the numbers of the colours chosen as denominators, we shall find that, in accordance with the arrangement of the colours and their numbering, in a person with normal chromatic sense, the first number of the denominator will always be the number of the numerator, because the different shades of each colour are grouped in series of tens—the greens are all under 30, the purples under 40, the reds under 50, and so on, their corresponding test number being 3 for green, 4 for purple, 5 for red, and so on.

Let me give a few practical illustrations. A patient presents himself. Test 3 (the pale green) is given him. He stops the wheel only at 30, 31, 32, 33. C. S. $= \frac{3}{30 \cdot 31 \cdot 32 \cdot 33}$. In other words, his colour sense is normal. Another patient presents himself. No. 3 is given to test. He selects 1, 5, 7, 6 (confusion colours). C. S. $= \frac{3}{1 \cdot 5 \cdot 7 \cdot 6}$. He must therefore have dyschromatopsia. Has he partial achromatopsia? No. 4 is now given him to sort (purple). He stops the wheel only at the series of $40 - \frac{4}{41 \cdot 43 \cdot 44}$. He has no partial achromatopsia. Had he stopped the wheel at 60 (blue) or 80 (violet), his colour sense would have been recorded $\frac{4}{41 \cdot 43 \cdot 60 \cdot 80}$, and he would have been suffering from red-blindness, according to the Young-Helmholtz theory. Had he selected with Test 4 any of the series of 30 (greens), or any of the darker greys contained between 19 and 29, he would have been green-blind, according to the same theory, and his case might be thus recorded: $\frac{4}{40 \cdot 30 \cdot 24 \cdot 27}$.

I need not multiply these illustrations, as far as the other tests are concerned. Anyone who is acquainted with Holmgren's system will see how they can be applied and recorded according to the plan I have laid down. A glance at the diagram will render easy of comprehension the somewhat complicated verbal description which has been found necessary. The instrument has been carefully and elegantly prepared by Messrs. Picard and Curry, the well-known opticians, of Great Portland-street, London. It works smoothly and well, and should, I think, find a place in the consulting-rooms of both the physician and ophthalmic surgeon, railway offices, recruiting depôts, private and public schools, and other places where the testing of the colour sense is a question of interest.

It has been urged as one of the chief features of Holmgren's system that the hand and eye combine together to reveal the defect of colour sense in patients who are submitted to this form of examination; the hesitancy and vacillation of their movements in selecting the skeins giving a clue to the deficiencies of their perceptive colour functions. In using the colour circle these manœuvres between the eye and the hand lose nothing; I think, indeed, they become more conspicuous, and frequently enable us to detect a colour-blind person at a glance. A person with normal chromatic vision, who has had the operation of the wheel explained to him, will sit down and go through the various tests in less than a minute. A colour-blind person seems to shrink from the wheel; when he sits down to it he turns it with hesitation, and in a few seconds usually convicts himself. There may be a difficulty sometimes with stupid persons, as there are in all forms of examination; but we must beware of those who *pretend to be stupid*, and who, in reality, are deficient as regards their colour perceptions, but hope to escape by leaving the examiner under the impression that they are lacking in intelligence. The examiner should not lose patience with this class, but should carefully explain what is wanted of them, and should himself go through the tests with the wheel. A person who is stupid only will at once see what is required, whilst one who is colour-blind will receive no assistance by seeing the examiner sort the colours.

Newcastle-on-Tyne.

A CASE OF SENSORY APHASIA,

WITH NECROPSY.

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I AM indebted to Dr. Rogers for permission to publish an account of the following case.

Mary C—— was admitted into Rainhill Asylum on March 28th, 1885. No particulars were known about her, and it was never possible to obtain any information, for nothing could be ascertained about her friends, and the patient herself was unable to assist us. She was a grey-haired old woman, a little above middle height, and appeared to be about sixty-five years of age. Her irides were grey; the right pupil 3 mm., the left 2½ mm.; both acted well to light and to accommodation. The tongue was protruded straight, but showed considerable fibrillar tremor. There were slight signs of pulmonary emphysema, expiration being a little prolonged and wheezy. There was evidence of cardiac hypertrophy; the cardiac dulness was a little increased to the left, the apex beating in the fifth space in the nipple line, and there was a well-marked systolic bruit at the apex, heard with almost equal distinctness at the base; the aortic second sound was loud. The arteries generally were abnormally distinct. The urine contained the merest trace of albumen, but no sugar. No paralysis of any kind.

Mental condition.—She was, when admitted, very quiet, scarcely attempting to speak except when addressed; when a conversation was opened with her, however, she disclosed great amnesic defect. She gave her name as "Mary," but could not get any further, and, in fact, answered "Mary" to a number of quite unrelated questions. When shown various common objects, such as keys, a knife, &c., she could not name one of them, nor could she be got to repeat the names told her, except in one instance; she did not, indeed, seem to recognise the objects, nor could she be got to indicate, by gesture or otherwise, their use. To many questions she answered "Yes" quite irrelevantly. She could, however, talk pretty fluently when left to herself, though it was impossible to get anything connected out of her, as she constantly was at a loss for words, or misplaced them, and frequently repeated sentences or parts of sentences over and over again. She could, nevertheless, generally give some indication of what she wanted. She could not write, but seemed to try to make it understood that her failure was due to her right hand being numb; she had, however, free use of it. She appeared to a certain extent conscious of her defect, for frequently, when asked the name of anything, she said, "I cannot speak it"; but the impression conveyed was that she was only partially aware of her failings, and that there was some intellectual defect beyond her mere incapacity for naming objects. She clearly did not understand many things that were said to her. She frequently showed some amount of emotional excitement when unable to say what she wished.

About two months after admission—viz., on May 23rd—the patient had three epileptiform fits. On June 27th the following note was taken: "Mental condition much the same; she sits still most of the day very quiet, without speaking, unemployed; occasionally talks a little to herself. She has some command of words, but cannot apply them properly, and her conversation becomes, in consequence, ludicrously incoherent. She cannot name any object shown her, though she clearly recognises these at times, and assents when the proper name is given her; she is, however, *just as often wrong as right*. She also has a certain perception of her own defect, for she says she knows what a thing is if she could only name it, and shows some emotional excitability at her repeated failures. She clearly understands many things said to her, for she puts out her tongue and shuts her eyes when told to do so; says 'Good morning' appropriately. There appears to be some general intellectual feebleness, in addition to the amnesia."

After this date the patient got very restless. She would

come forward spontaneously every morning on the medical visit and endeavour to tell a long story about herself, trying to make up for her defect of speech by the use of gesture. She was, however, never able to express her meaning, though she frequently seemed to wish to make some complaint of her bodily condition; she always seemed very agitated, and became very depressed at her repeated failures. This continued more or less for a few months, and she then gradually became quiet, seeming to get more reconciled. On Oct. 18th she had another epileptiform fit; this was not repeated.

On March 4th, 1886, the patient's condition was noted to be as follows: "She is much quieter and less obtrusive than formerly, which may possibly be due to the fact that she has found out how impossible it is for her to make herself understood. She can say numerous words and sentences, but what she says is almost all irrelevant and incoherent, although not completely so. She seems quite destitute of the power of naming, and is unable to recognise the names of objects, even when these are given her, although this inability is not quite complete. She gives her name as 'Mary,' but cannot be got to give her surname, saying, 'I cannot speak it'; this is, indeed, a favourite expression. Shown a knife and asked what it is, she says, 'I know the price of it,' but she cannot give the name; and when various names are suggested, dissents from most of them, but agrees both when 'key' and 'knife' are suggested. Shown a pocket-book, she cannot name it; and when asked if it is a book, says 'No,' as she does when other names are suggested, but shows that she understands the use of it by opening it and pretending to write in it with her finger. Shown a prayer-book, she opens it and looks as if she understood it, but when asked what it is she cannot say in the least; and when 'knife' is suggested, assents; but afterwards, having opened it at the Psalms, says spontaneously, 'This is the Psalms'; on being asked to read it she makes signs for glasses, which are given her, and she appears quite able to see the print, but cannot read a word, and says, 'If I could speak it, I could say it.' Given a pencil and paper and asked to write down the words, she cannot make a stroke, even when the letters are dictated to her. The plantar and abdominal reflexes are well marked, as also the knee-jerks. Sensation appears good everywhere. Right pupil 3½ mm.; left, 3 mm., the latter slightly irregular; both act to light and to accommodation, but are sluggish. Attempts were made to test the patient's vision for hemiopia &c., but no reliable results were obtained. Tongue protruded straight; steady as a whole, but shows great fibrillar tremor."

On the morning of April 12th the patient died very suddenly and unexpectedly. She had just dressed herself, and was sitting on the side of the bed, when she suddenly fell back unconscious; she became pale and frothed at the mouth, but no convulsions were recognised; she died in a quarter of an hour.

Necropsy, seven hours after death.—Skull-cap a trifle thick. Dura mater somewhat abnormally adherent anteriorly. Longitudinal sinus empty; about three ounces of fluid in subdural space. Arachnoid generally very white and opaque; it and pia mater decidedly thickened; everywhere strip readily; no adhesions. Moderate general wasting of gyri, with corresponding excess of subarachnoid fluid. On the outer surface of the left hemisphere, occupying the region of the inferior parietal lobule, was a deep depression caused by the destruction and absorption of the convolutions here situated. The depression was bounded above by the intra-parietal sulcus, below by the posterior half of the parallel sulcus, in front mainly by the lower part of the ascending parietal gyrus, and behind by the occipital lobe. The convolutions implicated were the supra-marginal, the angular, and the posterior half of the superior temporo-sphenoidal. The angular gyrus had disappeared in its anterior three-fourths, the posterior fourth remaining attached to the occipital lobe; the posterior three-fourths, or rather more, of the supra-marginal gyrus, was also destroyed, a small portion of the anterior part, where it joined the ascending parietal gyrus, being intact. The same destruction had overtaken the posterior half of the superior temporo-sphenoidal gyrus. The destruction of brain tissue here was complete, and was not confined to the outer aspect of the convolutions, but extended into the white matter almost down to the lateral ventricle; at the posterior end of the ventricle, indeed, over an irregularly circular area about the size of a florin, there was only a layer, not more than a line in thickness, of disorganised brain substance, between the inner surface of the ventricle and the outer surface of the cerebrum. This destruction of brain tissue appeared to have been due to a process of necrotic softening and subsequent absorption, doubtless from the cutting off of the blood-supply by the plugging of the vessel supplying the area in question. The destroyed area corresponded pretty accurately with the region of distribution of the parieto-sphenoidal branch of the middle cerebral artery. The convolutions of the motor area were absolutely intact, as indeed were all the remainder, both in this hemisphere and the right. Left ventricle considerably dilated, right moderately so. Cortex of normal pale grey tint, of average depth, and lamination distinct. Consistence of brain good. Basal ganglia normal, as also cerebellum, pons, and medulla. The brain (immediately after removal) weighed 1169 grms.; right hemisphere, 476 grms.; left hemisphere, 403 grms. (both stripped of membranes); cerebellum, 123 grms. Numerous atheromatous patches on basal vessels and main branches. The heart weighed 11½ oz., and showed distinct hypertrophy of left ventricle; valves competent; slight thickening of base of aortic valves, and of anterior flap of mitral. Moderate atheroma of lower portion of aorta, and this vessel slightly dilated. Lungs moderately emphysematous, but otherwise normal. Liver

Lateral surface (left). The shaded portion indicates the area destroyed. (This figure is from a photograph kindly taken for me by Mr. F. T. Paul.)

and spleen normal. Kidneys each weighed 5½ oz. Capsules somewhat adherent, leaving a distinctly granular surface on stripping. Cortex of right fairly normal; that of left somewhat diminished in depth, and in places fatty; in the centre was a distinct cicatrical depression.

Remarks.—The case before us presents us with an example of disorder of speech due to lesion of the perceptive sensory centres in which spoken and written speech are elaborated; the motor centres, or those which preside over the expressive part of the process of speech, being intact. The case, indeed, is an example of combined *word-blindness* and *word-deafness*. That the above-mentioned sensory centres should simply be a part of the general cortical centres for sight and hearing is what we might have anticipated, and numerous cases have been recorded in which the subjects of this form of aphasia have exhibited after death a lesion in the same situation as in the case here described—viz., in the inferior parietal lobule and posterior part of the first temporo-sphenoidal gyrus on the left side. In the case under consideration the destruction did not involve quite the whole of this area, which may perhaps account for the fact that the patient's defect was not absolute; but I think it equally probable that the corresponding centres in the opposite hemisphere might have been able to furnish some assistance.

THE BOARDING-OUT OF PAUPER CHILDREN.—The plan of boarding-out children belonging to the workhouse has for the past twenty years been tried in the Cork Union, and with very satisfactory results, as shown by the annual inspection of the children last week. The movement originated in consequence of an inquiry which was held in 1862 at the instigation of Sir John Arnott, relative to the great mortality in the workhouse of orphan and deserted children. The guardians pay a monthly sum of 12*s.* 2*d.* for the rearing of each child. During the past twenty-four years about 1000 children have been sent out to nurse, and the results must be regarded as encouraging, as during that long period not more than twenty of the whole number died. When the children arrive at the age of thirteen they are generally adopted by their foster-parents, and in this way avoid the contaminating influence of the workhouse.

CASE OF PARTIAL HYSTERECTOMY FOR FIBRO-MYOMA.

BY JAMES BRAITHWAITE, M.D.,
OBSTETRIC PHYSICIAN TO THE LEEDS GENERAL INFIRMARY.

IN a case of large and rapidly growing fibroid uterus, attended with such hæmorrhage as to endanger life, only two courses are open, if the patient is not to be left to her fate—viz., (1) to remove the uterine appendages, or (2) to remove the uterus as a whole, except the cervix, which forms the pedicle. I believe, however, that it has never hitherto been pointed out that if neither of these plans is available there is still open a third mode of operating, one which may at first sight appear to be, and possibly is, more hazardous than either, but which, nevertheless, avoids the principal dangers peculiar respectively to either oöphorectomy or hysterectomy as ordinarily performed. Apart from septicæmia, the principal danger of removal of the uterine appendages (for oöphorectomy, strictly speaking, is not the operation proper to these cases) is secondary hæmorrhage. One main source of danger in hysterectomy arises from retraction of the pedicle. Both these dangers were avoided by the mode of operating adopted in the following case—*how*, I will explain in its relation.

I will not go through the details of the history and diagnosis of the case, but will state briefly that the uterus was a mass of fibroids, reaching nearly to the under surface of the liver. It was still growing, although the patient was forty-nine years of age, and she was drained by hæmorrhage and wearied with constant pain. On January 26th last I made an exploratory incision with the view of seeing whether removal of the tumour were possible, or, if not, with the object of removing the uterine appendages. Mr. McGill and Mr. Robson of Leeds, and Drs. Black and Lever of Harrogate, were present. After making the abdominal wall incision, it was found that hysterectomy as ordinarily performed was impracticable, because there was no narrow part to form a pedicle, for the cervix was distended with fibroid growths to a large size, and it was impossible to raise the uterus upwards from the pelvis owing to its being held down by thick and firm but short broad ligaments. On the other hand, removal of the uterine appendages, though easy on the right side—and, indeed, I did remove a large hydro-salpinx,—on the left side would have been extremely hazardous, as the ovary was embedded in the side of the tumour, had no pedicle, and was entirely covered with large thin-walled veins. Thinking it better for the patient to die a natural death than from intra-peritoneal hæmorrhage within twenty-four hours, and death from natural causes appearing less probable than death from the operation, if proceeded with, I returned the tumour into the body, intending to close the wound. At this point my colleagues and friends forsook me, thinking all was over. As soon, however, as the tumour was replaced, blood welled up in large quantity, and its source could not be discovered; the tumour was therefore again raised and examined, as it was more than once, because the hæmorrhage ceased when the tumour was raised. The ligature was safely on the place whence the tube had been removed, and the bleeding did not come from this source. I therefore for a moment found myself in a difficulty from which no means of extrication could be seen. Not attempting any traction, I simply flexed the uterus forwards out of the wound, applied a Lawson Tait's clamp wire, and removed it by cutting through the body at a spot which seemed the most favourable, and where it was about four inches in diameter. When the clamp was tightened up this was reduced to a diameter of about two inches and a half. On bringing the wound together round the pedicle, it rested on all sides upon the mass beneath, which was as large as a uterus at five months' gestation. By weight, I suppose that two-thirds of the tumour would be removed, and one-third left behind. The uterine cavity was cut through in removing the tumour, and of course both ovaries went with it. Hæmorrhage from the stump occurred several times, but it was controlled, and the patient made an excellent recovery, thanks in great measure to the assiduous care of the resident obstetric officer to the infirmary, Mr. Croft.

It seemed to me that the successful issue of this case depended a great deal upon what might be considered the very fault of the operation—viz., the large size of the mass left behind. As stated, the edges of the wound rested upon this mass all round and adhered to it, so shutting off the peritoneal cavity. For the same reason there was no traction upon the pedicle—indeed, it never retracted, it was too large, and consequently all danger from this source was avoided. The mass left behind did no harm; it ceased to grow, and to some extent has shrunk. It now forms part of the abdominal wall, and has upon its surface a small fibroid, which has appeared since the operation, although the base from which it grows is smaller.

Leeds.

NOTES OF A FATAL CASE OF POISONING BY BISULPHIDE OF CARBON; WITH POST-MORTEM APPEARANCES AND REMARKS.

BY WM. FOREMAN, L.R.C.P. & L.R.C.S. ED.

POISONING by bisulphide of carbon is so rare that the following notes of a case may be deemed of some interest.

On March 15th of the present year, I was called at 5.30 P.M., to J. S——, aged sixty-three, shoemaker. He had been drinking for the previous ten days, and had come in from the public-house at 4.30 P.M., and asked that some gin should be sent for; this was done, and almost immediately afterwards he was noticed to be strange, and said, "I have done it." It was then perceived by a bottle close to him and by the smell that he had swallowed a preparation used by him in his trade, and which turned out to be bisulphide of carbon. I was at once summoned, and probably a quarter of an hour elapsed between his taking the poison and my seeing him. When I saw him he was sensible, and wanting to go in the back yard to defecate, but the persons present were trying to keep him in his chair. I was not able to get any information from him. There was a very strong smell of bisulphide of carbon in the room. I at once administered a tablespoonful of mustard with six ounces of warm water. He drank about four ounces. I then left him, and prescribed forty grains of sulphate of zinc, to be taken at once in warm water if the mustard had not acted; afterwards to take fifteen grains each of bicarbonate of soda and carbonate of magnesia every ten minutes. At 6.15 P.M. I saw him again, at which time he was completely unconscious, and could not be roused. As he had not vomited, I introduced the stomach-pump, but only obtained a small quantity of brown-coloured fluid, with a white frothy substance floating on the top, due probably to the mixture of soda and magnesia which had been given. I washed out the stomach with warm water. The pupils were normal, but reacted to light; conjunctivæ suffused and insensible to the touch. Respiration slow, long, and stertorous; pulse small, rapid and compressible, varying from 150 to 160 a minute. Surface of the body cold and clammy; tongue thick and furred. After washing out the stomach, I gave him two tablespoonfuls of brandy in half a glass of water through the stomach-pump. He never rallied, but died about two hours and a quarter after taking the poison.

Through the kindness of our coroner, Mr. Rowbottom, my partner, Mr. Berry, received instructions to make a post-mortem examination, which we made conjointly twenty hours after death, when the following appearances were noted:—Rigor mortis complete; pupils normal; hypostatic congestion of dorsum; body well nourished. On opening the head, the dura mater was adherent to the calvaria; surface of the brain much congested; veins gorged with black blood. Brain substance healthy. Thorax: The left lung was slightly adherent at the apex; no effusion in the pleural cavities; lungs healthy. Heart: The right ventricle contained about an ounce of dark fluid blood; walls covered externally with a layer of fat; left ventricle firmly contracted and empty. Abdomen: The stomach contained about a quarter of a pint of fluid, with flakes of lymph in it, slightly ropy, and appeared to be water and mucus. A faint smell of bisulphide of carbon was perceptible. The submucous tissue was injected, and there was a number of minute hæmorrhages. The posterior wall of the stomach was much more congested (to the size of a crown-piece) than the anterior surface. There was no perforation or

abrasion of mucous membrane. The spleen was small, but healthy. The liver was normal in size, and healthy. The kidneys were surrounded with a large quantity of fat; they were slightly congested, but healthy. The bladder contained about two ounces of urine, having a slight smell of bisulphide of carbon. There was less of the cadaveric smell than is usual in post-mortem cases.

Remarks.—Bisulphide of carbon would appear to be a narcotic poison and very powerful in its action. In this case, although I had difficulty in ascertaining the quantity, half an ounce would be the full amount taken. In the *Medical Times and Gazette* of 1878 (vol. ii., p. 350) I find a case reported with symptoms similar to the foregoing, but with a better termination, as the patient recovered after being comatose for some hours. In that case two ounces is said to have been taken. In my case the patient became comatose in half an hour and could not be roused, and, although the stomach was emptied, no abatement of symptoms occurred and death took place in two hours and a quarter.

Wigan.

ON A CASE OF CÆSAREAN SECTION.

BY JOSEPH HARPER, L.R.C.P. LOND., &c.

MRS. G——, twenty-seven years of age, straw-plaiter, married, primipara, a very small woman, 5 ft. high, weighing 98 lb., living in a small, close, ill-ventilated house over a laundry in Barnstaple, engaged my partner, Mr. Henry Jackson, to attend her in her approaching confinement. She was taken ill about 5 A.M. on Dec. 1st, 1885; the pains were slight, and not enough to keep her awake for any time; about 10 A.M. they were worse, and came on regularly at 1 P.M. She then sent for Mr. Jackson, who, on his arrival, found the patient dressed and downstairs. He gave some general directions, did not make any vaginal examination, and told the nurse to send for him when he was wanted. The liquor amnii escaped at 5 P.M. He arrived at the house at 6 P.M., and, on making an examination, found the os fully dilated and the head and right arm presenting. The head could be felt at the brim of the pelvis. He tried to turn, but failed to do so. He then sent for me, requesting me to bring chloroform. I went, and found the presentation as described. Chloroform was administered, and when fully under its influence I tried to push up the arm of the child, but was unable to do so. I then tried to turn, but failed. After several attempts Mr. Jackson again tried, but without success. The hand could be got up as far as the chest of the child, but the difficulty seemed in the outlet of the pelvis, for it was impossible to get the arm further up the passage. The cord now became prolapsed, and, as it was not pulsating, I determined to perforate and try to deliver with the crotchet. After perforating, I introduced the crotchet into the skull and brought the head well into the brim of the pelvis, but was unable to deliver. We then decided to ask Mr. Cooke to come and give us his assistance. He tried to turn, but met with the same difficulty as we had done, and with the same result. He then tried with the crotchet; but after repeated unsuccessful trials, the external parts being swollen and hot, our patient having been under chloroform for three hours, we reluctantly came to the conclusion that Cæsarean section was the only chance for her.

The necessary preparations having been made, and chloroform administered by Mr. Jackson, I washed my hands and the surface of the abdomen with a strong solution of carbolic acid, and the instruments and sponges were immersed in carbolic solution. A catheter was then passed and the bladder emptied. I made an incision in the linea alba from just below the umbilicus to within a couple of inches of the pubes; but finding the incision too small had to extend it on the right about an inch above the umbilicus. After making an incision into the cavity of the abdomen, Mr. Cooke kept the wound on the stretch with his two forefingers, and the nurse supported the sides of the abdomen and kept the uterus well forward. There was very little hæmorrhage. The empty bladder was visible just above the pubes. I then made an incision of about four inches in the wall of the uterus, which appeared thin and pale and came down upon the child covered with the membranes. There was no hæmorrhage, but the edges of the wound appeared to retract. I removed the body of the child with ease, but the head, from having been pulled down into the brim of the pelvis, required some force for its extraction. The placenta, which was at the back and lower part of the uterus with the membranes, came away with the child, a male, weighing 6½ lb. There was a copious hæmorrhage from the interior of the uterus and also from the sinuses of the uterine walls, which I checked by pressing with my hand, but which recurred directly I let go. Mr. Cooke now kept the edges of the wound together for me, and I introduced a silver wire suture, with the effect of checking the hæmorrhage, and the uterus contracted under a little pressure. The cavity of the abdomen was washed with warm carbolic solution, the omentum replaced, and the edges of the abdominal wound brought together with silver wire sutures. Iodoform was sprinkled over the wound and covered with a piece of lint soaked in carbolic oil, a pad of lint being placed on either side of the wound. Gauze, cotton-wool, and a binder were applied, and the patient removed to bed, which had been properly prepared for her. A hypodermic injection of morphia was given, and she was left tolerably comfortable. Pulse 136; respiration 28; temperature 99°.

Dec. 2nd.—11.45 A.M.: Has been very comfortable all night, dozing most of the time. Pulse 120; respiration 22; temperature 99·4°. Four minims of morphia injected; catheter passed. — 9.30 P.M.: Complains of pain in right iliac region; lochia natural in colour and quantity. Pulse 126; respiration 26; temperature 99·6°. Catheter used and morphia injection repeated. No sickness.

3rd.—11 A.M.: Has had fair sleep; no sickness; has taken milk, egg, brandy-and-water, and ice; lochia scanty, but of good colour. The vagina to be washed out with weak solution of Condy's fluid twice a day. Pulse 112; respiration 26; temperature 100°.—9.40 P.M.: Has vomited twice today; complains of flatulence. Pulse 100; respiration 30; temperature 99·4°. Catheter introduced; morphia injection repeated.

4th.—11 A.M.: Has slept fairly well, but is rather restless and thirsty; has been sick several times. Pulse 110; respiration 30; temperature 100·4°. Introduced catheter; injection repeated. Takes milk, beef-tea, brandy-and-water, and ice. Pain in side less, and feels comfortable.—8.30 P.M.: Pulse 112; respiration 30; temperature 99°. Introduced catheter; injection repeated.

5th.—11 A.M.: Has passed urine freely; bowels acted once; several clots have come away; taken very little food. Pulse 110; respiration 28; temperature 98·8°. Injection repeated.

6th.—Has slept well during early part of night; feels comfortable; takes more food; no sickness, but has pain on each side of the bowels. Pulse 104; respiration 24; temperature 100·6°. Injection repeated.—9 P.M.: Passed a fair day; pain in sides slightly increased; inclined to be excited; complains of swelling and irritation of throat. Pulse 100; respiration 24; temperature 100·6°. Injection repeated.

7th.—11 A.M.: Has passed a good night. Pulse 104; respiration 30; temperature 100°. Injection repeated.—10 P.M.: Ordered an enema, which gave great relief and brought away a large quantity of fæces.

8th.—Slept well; complains of pain in left side: slight fulness. Pulse 98; respiration 26; temperature 99·4°. Injection repeated.—9.30 P.M.: Injection repeated.

9th.—Removed the sutures; abdominal wound healed; has had a good night; slept well; no sickness; bowels moved once naturally; vaginal discharge very little, but rather offensive. Pulse 100; respiration 26; temperature 100·4°. Omitted the morphia.—8 P.M.: Pulse 100; respiration 28; temperature 99·8°.

10th.—11 A.M.: bowels have acted freely twice; has had some good sleep; no sickness; no pain in breasts, nor has any milk been secreted; lochia pale, and still offensive. Pulse 92; respiration 24; temperature 98·4°.

She progressed well until the 13th, when she had a copious discharge of bright-red blood. Quinine, iron, and extract of ergot were given. From this time she progressed rapidly, and on the 26th a belt was applied. She came downstairs on the 29th. For ten days prior to the 30th, Mr. Jackson tells me, the pulse, temperature, and respiration had been normal. On Feb. 26th it was stated that she had remained well, with the exception of slight dyspepsia, but had not yet menstruated.

Barnstaple.

CASE OF

CÆSAREAN SECTION AFTER PROLONGED LABOUR IN CONTRACTED PELVIS AND HYDROCEPHALIC (?) FŒTUS.

BY C. D'A. COLLINGS, M.A., M.B. OXON.

THE following case may be of interest to the readers of THE LANCET.

On the evening of Dec. 31st I was summoned to see Mrs. W——, as the midwife in attendance found that the labour did not progress. The patient was an ordinary-sized woman, a primipara, forty-three years of age. She estimated her pregnancy to have lasted ten months, and said that she had felt no fœtal movements for about a month; that she had had some indefinite abdominal pains for some time; but reckoned her labour pains to have begun on the previous Sunday (Dec. 27th), since which day she had taken scarcely any nourishment and had had no sleep. The liquor amnii was thought to have come away on the morning of Dec. 31st. On examination, a smooth, rather tense sac was found presenting in the upper part of the vagina, feeling like the bag of membranes, but becoming only slightly less tense during the intervals of the pains; and on passing the finger round in search of the margin of the os, this could not be felt, but small collections of hair were found apparently adhering loosely to the sac, as some of it was easily extracted for examination. The appearance of the sac as seen when the walls of the vagina were separated and a light cast up, was smooth, slate-coloured, and somewhat shining. A puncture with a grooved needle gave exit to a drop or two of semi-liquid matter of a sanguineo-purulent appearance. The bones of the fœtal head could not be felt on pressing the sac. The patient's pulse was 120 per minute. A bruit synchronous with it was heard over the abdomen to the left of the umbilicus, both above and below, but not to the right; the right side of the abdomen was rounder and fuller, as if the back of the child lay on this side.

As the presenting part was taken to be an encephalocele or a hydrocephalic head, Dr. Le Page was called in consultation, and it was decided to open the tumour, as no progress was made with the labour, and it was found impossible to push the tumour up or get the hand into the uterus to turn. The tumour was opened with a lancet, and a quantity of semi-fluid brain matter mixed with blood escaped, having the general appearance of the central softening in a case of tubercular meningitis. The thin parietal bones were then felt movable within the sac, and the base of the skull was felt just above the brim. The pelvic brim appeared to be equally contracted (justo-minor), and the hand could be inserted only with difficulty into the uterine cavity, the walls of which remained firmly contracted; and after several attempts under chloroform, it was found impossible to reach the feet to perform version, and on each withdrawal of the hand the presentation was found to have returned to a shoulder, and one of the fœtal arms appeared in the vagina. Fearing that further attempts at version might injure the uterus, it being so firmly contracted and the liquor amnii having so long been drained away, it was decided to draw down the arms in turn and amputate them at the shoulder-joint, in the hope that with the diminished width of shoulder the head and body might be drawn down with the craniotomy forceps or the cephalotribe. The amputation was easily accomplished with a curved blunt-pointed bistoury, each arm being drawn down in turn and disarticulated at the shoulder-joint; it was, however, still found impossible to get an instrument beside the hand through the brim, so as to decapitate or get hold of the base of the skull, which was fixed above the symphysis pubis. As the abdominal section appeared to be now the only means of delivery, it was decided to desist from further attempts for a few hours, in faint hope that natural efforts might fix the remains of the head in the pelvic brim. The patient was left between 2 and 3 A.M., with instructions for her being conveyed to the hospital early in the morning. When seen in the morning the swelling of the soft parts had further obstructed the pelvic canal, so that the hand was inserted with difficulty; the presenting part was found to be the amputated left shoulder. Drs. Carey and Robinson having been called in for further consultation, and an ineffectual attempt at evisceration having been made by passing the perforator into the scapular region, it was decided to proceed to the Cæsarean section without further delay.

The patient therefore, being kept under chloroform and ether, the abdomen was pressed inwards towards the middle line, so as to shut off as much as possible the peritoneal cavity and prevent protrusion of the intestines. An incision was then made from below the umbilicus to within an inch of the symphysis pubis, the peritoneal cavity opened, and bleeding from the abdominal walls arrested. The bladder was found to be semi-distended, and pushed up above the pubes to the right; the incision was therefore enlarged upwards for about an inch by the side of the umbilicus. An incision of nearly the same length was then made through the uterine wall, which was about one-third of an inch in thickness, when the back of the fœtus was exposed. There was scarcely any bleeding from the incision through the uterine wall. The fœtus was quickly extracted, and the placenta, which was partly detached, was taken out through the abdominal wound with a considerable quantity of partially clotted blood; part of the membranes and cord which remained were drawn out per vaginam. The uterus remained flabby and uncontracted even on pressure. Four interrupted sutures of catgut soaked in chromic acid were put into the uterine wound. The peritoneal cavity was sponged out, and the abdominal wound secured with silver sutures (three deep and three superficial), and supported with straps of carbolised adhesive plaster. The wound was dressed with carbolised lint and tenax, and a binder tightly fastened round. The patient was pulseless after the operation. Hot-water bottles were put to the feet, and her mouth moistened with brandy and water. The operation was completed about 2 P.M. By 4 P.M. she had recovered consciousness, and the pulse, though weak, was distinctly felt, about 120 per minute. In the evening she was feeling better; pulse slightly improved. She complained of thirst and some pain in the abdomen, but said that the previous pains in the back had quite disappeared; the sordes about the teeth had gone, and she took some beef-tea. A draught, composed of twenty-five minims of tincture of opium and a drachm of liquid extract of ergot in an ounce of water, was given, after which she had an hour or two of sleep. Her condition remained about the same until 4 A.M., from which time she began to wander in her mind. When called to see her at 7 A.M., her pulse could not be felt, and she scarcely answered questions put to her. Fifteen minims of ether were given hypodermically, but she did not rally, and died soon after 9 A.M., about nineteen hours after the operation. No post-mortem examination was made.

Guernsey.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collec as habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE BEARING ON THE TREATMENT OF ANEURYSM BY THE INTRODUCTION OF STEEL WIRE OR OTHER MATERIAL INTO THE SAC; REMARKS.

(Under the care of Mr. HOWARD MARSH.)

IT will be remembered that on Feb. 23rd, Dr. Cayley brought before the Medico-Chirurgical Society a case under his care in which Mr. Hulke had introduced forty feet of steel wire into the sac of an aortic aneurysm, with the result that the portion of the tumour acted upon had become completely solidified. Three important points were established by this case, and the discussion to which it gave rise: (1) That the introduction of foreign substances into aneurysms is usually easy; (2) that, so far as present experience goes, this proceeding appears to involve very little danger when it is carefully carried out; (3) that only nine cases in which this operation has been performed have yet been published,

so that our experience of it is far too limited to warrant any conclusion as to its real value. The following instance should be recorded, not only because, while the cases are so few, every additional example is of use, but also because a difficulty was encountered that is very likely to occur, but which has not hitherto been met with.

R. M——, aged fifty-six, formerly a private in the army, never syphilitic, and always temperate, was admitted on Dec. 14th last, having sixteen days before noticed a swelling immediately above the clavicle in the course of the left common carotid, about the size of a bantam's egg, and presenting all the features of an aneurysm. The swelling was well defined above, but its lower border extended beneath the clavicle. On careful examination Dr. Andrew could detect no evidence of intra-thoracic tumour, and the case had the appearance of a sacculated aneurysm limited to the carotid just where it emerges from the chest. Pulsation could, it was thought, be felt in the carotid higher in the neck, but it was very faint; pulsation in the left superficial temporal was very indistinct. The patient said that since the swelling commenced he had suffered much pain in the neighbourhood of his heart, and on the day after admission he had some difficulty of breathing, and pain and numbness extending down his left arm. He appeared in good general health. In consultation with Mr. Savory and other members of the staff, it was agreed that the case was a suitable one for distal ligature. The diminished pulsation in the artery beyond the sac was seen to be an important feature in regard to this proceeding. Mr. Marsh, however, thought it might be explained by the supposition that the trunk of the carotid was overlapped and pressed upon by the tumour, for if the patient's history was correct, that the swelling had existed only sixteen days, it was very unlikely that the artery was already obliterated.

On Dec. 19th Mr. Marsh operated. He exposed the carotid on a level with the cricoid cartilage. Its pulsation was very doubtful, and the vessel felt hard and resistant. Having placed two ligatures (kangaroo tendon) round its trunk nearly three-quarters of an inch apart, he divided the artery between them. This being done, it was found that the lumen of the vessel was entirely filled with a firm tawny clot, adherent to the arterial wall and evidently of some age. From this condition of things it seemed clear that the arterial disease was of much longer duration than the patient was aware of. The healing of the wound progressed favourably; but at 9 P.M. on the 21st he was suddenly attacked with difficulty of breathing, and became very restless. As this condition continued, a fifth of a grain of morphia was injected subcutaneously at 1.30 A.M. He went off to sleep in a few minutes, but his breathing soon became noisy and irregular, and he was partially comatose. Later, his breathing grew still worse, his face was dusky, and he seemed in a dying condition. On being propped up with pillows, however, he improved, the noisy breathing ceased, and he was able to swallow. On the 22nd there was considerable swelling and induration about the wound and in the submaxillary region, with difficulty of deglutition. This attack was associated with marked enlargement of the sac, and the urgent symptoms were no doubt caused by sudden increase of pressure on the structures at the root of the neck. He was now placed on restricted diet, according to Tufnell's method, and kept as far as possible at complete rest. On Jan. 5th it was found that some pus had collected at the bottom of the wound beneath the sterno-mastoid muscle; a counter-opening was therefore made at the posterior edge of the muscle, and drainage secured by a strip of gutta-percha tissue. The wound gave no further trouble, and for the next month there was little increase in the size of the tumour, pulsation was less distinct, and the swelling was firmer: so that Mr. Marsh was satisfied with the progress of the case, and thought that deposition of fibrin was going on in the sac. But after this, between February 10th and March 5th, the swelling obviously increased, and became considerably more prominent. It was now determined to adopt the method of introducing some foreign substance into the sac, and on March 10th, having selected a part of the swelling a little removed from its greatest prominence, and where the skin was unaltered, but where pulsation was yet very distinct and apparently close to the surface, he passed a very fine trocar and cannula about an inch and a half into the aneurysm, and then withdrew the trocar. No flow of blood, however, followed, the cannula remaining as dry as if it had been inserted into a fatty tumour. A fine probe was then passed through the cannula for a distance of fully three inches. It entered readily, but still no blood escaped, nor was the end of the probe at all blood-stained as if it had been in contact with fluid blood. He then endeavoured to pass in some horsehair, but was unable to accomplish this, for as soon as it had traversed the length of the cannula its passage was arrested. On introducing the probe again, its end could be felt moving freely as if in a cavity, and although no blood escaped there was no doubt that the cannula was in the sac, for the pulsation was so distinct that the thickness of the soft parts over the aneurysm could certainly not be more than, at the most, a third of an inch. The supposition was that a portion of the clot had been frayed out, carried before, and was obstructing the end of the cannula, and was also carried in front of the end of the probe, so that the blood stream had not been fairly reached. As the patient was not under an anæsthetic, it was thought best not to proceed further—nor, indeed, was it considered safe to do so; the cannula was therefore withdrawn.

No bad result followed the operation, and Mr. Marsh intended in a few days to introduce the cannula at some other point. The patient, however, was unwilling that this should be done until he had been home, in order to arrange some family business about which he was anxious. He was persuaded to remain quiet for a time. On April 1st, however, he insisted on going out, but said he would return as soon as his affairs were settled. He did so on April 15th, when it was found that, though the swelling had not materially increased, there was an abscess over the front of the sac of the size of a walnut, and covered only by a very thin layer of desquamating cuticle. On the 16th Mr. Marsh divided this, and about a drachm of pus escaped. This relieved the pain he had been enduring; but on the following day the floor of the abscess gave way, and a mass of firm, interlaced fibrinous clot, somewhat dome-shaped, and three inches long and an inch and a half wide, slipped bodily out of the aneurysm, and was followed by a gush of several ounces of blood. The opening was immediately plugged with lint soaked in perchloride of iron. From this time bursts of hæmorrhage occurred from time to time, and were arrested by the introduction of lint and perchloride. Mr. Burd, the house-surgeon, on several occasions passed two fingers into the interior of the sac while introducing the plugs, and bleeding was only arrested by firmly packing the opening, which was at length fully two inches across. It seemed remarkable that the patient could continue to exist in such a condition, yet his death took place only on the night of the 22nd—that is, fully five days after the wall of the aneurysm had given way.

At the post-mortem examination a large aneurysm of the transverse portion of the arch of the aorta, involving the lower part of the carotid, was found. The aorta was extensively atheromatous. The swelling had pressed upon and displaced the trachea.

Remarks by Mr. MARSH.—Several points offer themselves for discussion on this case. 1. As to the seat of the aneurysm. Bearing in mind the overwhelming frequency of aneurysm of the arch of the aorta as compared with aneurysm of the root of the carotid[1], and remembering how often aneurysm of the arch has been mistaken for aneurysm of the vessels which it gives off, both myself and others suspected that, after all, this was an aortic aneurysm. There was nothing, however, to confirm this inference from statistics, unless it were the pain in the region of the heart of which the patient had complained. The pulse in the radial artery, though rather feeble, was not perceptibly weaker than it was in the radial of the opposite side. Auscultation and percussion gave no evidence of thoracic aneurysm, and there was no absorption either of the clavicle or the sternum. On the other hand, the diminished pulsation in the carotid and the site of the swelling were consistent with the view that the aneurysm was a carotid one. The case must be added to many already published which show the great *primâ-facie* probability that an aneurysm at the root of the neck will prove to be connected with the aorta, rather than with any of the vessels which are derived from it. 2. The distal ligature of the carotid was, under the circumstances, useless, as the vessel was already occluded. But it is important to notice that the closure of the artery beyond the

[1] Mr. Holmes remarks: "I think I am not mistaken in saying that no preparation exists showing aneurysm limited to the root of the carotid artery on either side, though aneurysms have been found tolerably low down in the vessel."—System of Surgery, Holmes and Hulke, vol. iii., p. 117.

sac by the formation of a firm coagulum—an event precisely similar in its effect to ligature on Brasdor's principle—failed to cure the carotid part of the aneurysm. The case therefore ranges itself with those in which distal obstruction has no beneficial effect on the tumour. 3. I believe the entrance of the horsehair was prevented by the fact that the cannula had been introduced into a part of the aneurysm at which a considerable thickness of coagulum had been deposited. This coagulum, as we found when it was subsequently expelled from the sac, was not of the laminated kind, but resembled rather the loose, though tough, fibrillated clot that is often found interlaced among the columnæ carneæ in the left ventricle. This loose clot was no doubt carried forward on the points of both the cannula and the probe, so that neither of these instruments ever fairly entered the blood stream. 4. Very little experience has at present been gained as to which is the best material for introduction into the sac. In this case I selected horsehair, because, while this substance produced as speedy coagulation in a case under Mr. Bryant as steel wire did in Mr. Hulke's, I thought it would probably do less harm subsequently than the wire would. One could not help fearing that, though wire might become encapsuled, there was a greater probability that it might, later on, act as an irritating foreign body. 5. It was surprising to see to what an extent and for how long a time, plugging of the opening of the sac served to arrest hæmorrhage. As the post-mortem examination showed, here was an orifice in an aneurysm of the aorta and root of the carotid large enough, as Mr. Burd found, to admit the entrance of two fingers into the cavity of the sac. Yet the patient survived for five days, and died at last, not of hæmorrhage, but of dyspnœa and exhaustion.

HOLBORN UNION INFIRMARY.

A CASE OF EXCISION OF THE ELBOW-JOINT, WITH TROUBLESOME HÆMORRHAGE FROM THE BONES; REMARKS.

(Under the care of Mr. OSCAR B. SHELSWELL.)

A GIRL, aged nine, was admitted suffering from disease of the right elbow-joint, caused by injury some months previously. She was of delicate health and had a strong family history of phthisis. Prolonged rest, with arm in splint, effected no improvement. Abscesses were frequently forming about the joint, much discharge and pain existed, which were greatly undermining her health, and the bones were affected to a considerable extent. Excision was deemed advisable.

On May 14th, 1884, whilst she was under the influence of ether, an incision was made longitudinally over the olecranon and made to extend a little upwards and downwards. The condyles were cleaned, and the humerus then thrust out of the wound and sawn off well above the condyles; the head and neck of the radius (leaving bicipital tubercle) and upper part of ulnar, including the coronoid process, were removed. The bones at the line of section appeared healthy. One artery was tied with catgut, drainage-tube inserted, skin sutured with silver wire, wound dressed with carbolic oil, and Mr. Bryant's screw splint applied. A little oozing came on two hours after the operation, which subsided with the usual remedies, but recurred later on. As the former treatment failed to arrest it this time, and as the hæmorrhage was rather sharp, the wound was reopened at 11 P.M. under ether. No artery was seen spurting, but there was very considerable oozing from the cut ends of the bones. The actual cautery was applied, and after some difficulty the hæmorrhage ceased. The wound was plugged with iron and the arm firmly bandaged. The splint was kept on only a few days, as she seemed more comfortable without it. A small piece or two of dead bone, due to the cautery, came away, and the wound healed by granulation. Excellent movement resulted, pronation and supination being satisfactory and flexion and extension perfect, the arm being very useful, quite free from pain, and the girl vastly improved in health—in fact, quite well. She then left the infirmary and went to school, where she received a blow on the arm, which caused a little inflammation; this, however, subsided with rest, and the arm is now in a satisfactory condition.

Remarks by Mr. SHELSWELL.—I think this case is interesting as showing the necessity of removing an ample amount of bone in cases of excision of the elbow. It seems probable that the troublesome hæmorrhage from the bones in this instance was in consequence of the latter not being perfectly healthy at the time of division, notwithstanding the fact that so much was removed, the advice of Mr. Bryant to be free in the section of the bones being well borne in mind at the time of the operation. If such be the explanation it is probable that the good result was in consequence of the cautery destroying a little more of the bones, and thus satisfactorily preventing the necessity of a second operation.

NORTHAMPTON GENERAL INFIRMARY.

COMPOUND DEPRESSED FRACTURE OF THE SKULL INFLICTED BY A PISTOL; WOUND OF THE FACE; TREPHINING; RECOVERY.

(Under the care of Mr. R. A. MILLIGAN.)

FOR the history of this case we are indebted to Dr. J. Oswald Lane, late house-surgeon.

T. B——, aged forty-five, was admitted on March 4th, 1886, with the following history:—The evening before, after shooting his sweetheart and father, he shot himself in the face with a pistol loaded with No. 5 shot. He then ran into a neighbouring wood, and lay there hiding from his pursuers till 8 A.M. the next morning, when, fearing capture, he shot himself in the skull.

On admission, about 3·30 P.M., he was found to be suffering from two gunshot wounds. One on the right cheek, just below the zygoma and in front of the ear, was of a punctured character, with lacerated edges, a probe passing upwards and forwards subcutaneously an inch and a half. Another wound was found in the right parietal region, two inches and a half from the sagittal and two inches from the coronal sutures, also punctured and with lacerated edges, circular in shape, and half an inch in diameter. On probing, it was found to lead down to a depressed fracture of the parietal bone. Numerous shots could be felt under the scalp, especially about the forehead. The patient was conscious and answered questions rationally, stating that he had inflicted the wounds, and that he had never lost consciousness. At 5 P.M. he was put under ether, and, antiseptic precautions being taken, Mr. Milligan enlarged the wound over the fracture, removed the pericranium, trephined away a piece of bone adjacent to the fracture, and was then able to remove a depressed portion of bone of small size, and also four pieces of the inner table, which had been splintered and driven on to the dura mater, which, however, was not torn through; several shots were found underneath the depressed bone. The edges of the wound were brought together with wire sutures, and a drainage-tube introduced. Carbolised gauze dressings were used.

March 5th.—The patient passed a good night, having slept well. This morning he complained of slight headache. The wound was dressed, and looked healthy; slight hæmorrhage had occurred, but was soaked up by the dressings. Ordered three pints of milk, and ice-bag to the head. Pulse 84; respiration 28; temperature 99°.

8th.—Has gone on well; no head symptoms; wound is beginning to show granulations; has been dressed daily; temperature has not been higher than 99·6°.

9th.—Complains of rather more pain in the head, and there was found to be some œdema of the scalp and rather more discharge from the wound in the cheek. Several small incisions were made in the scalp.

10th.—The patient is rather more restless. There is some bagging of pus near the trephine wound; so two counter-openings were made and drainage-tubes inserted.

12th.—General condition much improved; purulent discharge much diminished.

15th.—From this date the patient progressed most favourably without any further complications, so that at the end of the month he was allowed to sit up in the ward. He was tried the next month on the capital charge, and is now an inmate of Broadmoor.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.—The annual meeting of this Society was held on the 2nd inst., Mr. Joseph White, President, in the chair. The following gentlemen were elected to fill the various offices for the ensning session:—President: Mr. Hatherly. Vice-Presidents: Mr. Joseph White and Mr. Haydon White. Treasurer: Mr. Stanger. Hon. Librarian: Mr. Burnie. Hon. Secretaries: Dr. B. A. Whitelegge and Mr. T. D. Pryce.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

Chronic Abscess of Female Urethra.—The Uterine Bruit.

A MEETING of the Society was held on July 7th, Dr. Potter, President, in the chair.

The following specimens were shown:—Dr. Daly: Growth removed from Uterus after delivery. Mr. Doran: Malformations of the Fallopian Tubes. Dr. Galabin: Growth removed from Cervix Uteri of a girl only seventeen years old. Dr. W. S. A. Griffith: Portions of Ovaries resembling Cystic Chorion. Mr. Knowsley Thornton gave details of the fatal termination of the case from which the specimens he showed at the previous meeting were removed.

Dr. HERMAN read a paper on a case of Chronic Abscess of the Female Urethra. The patient, aged forty-seven, had for four years suffered from dysuria, about two years from dyspareunia, and irritability of bladder, these symptoms gradually increasing in severity during this time. There was a tender swelling between the urethra and vagina. This burst into the urethra, pus being discharged. Examination with the finger through the dilated urethra eight days afterwards showed that the cavity was then about the size of half a walnut, with a soft, ragged, friable wall. Its interior was cauterised with nitrate of silver, and it soon contracted and disappeared. Four months afterwards the patient continued quite well. The author thought that there were two possible explanations of the origin of the abscess:—1. That it was the result of chronic congestion of the urethra, such as that described by Sir C. M. Clarke. 2. That it was a suppurating cyst. Abscess from either of these causes was rare. He quoted three cases that he had been able to find recorded. He gave reasons for thinking that the abscess in his case was probably not a suppurated cyst, and that the case was therefore to be classed with those of congestion of the urethra described by Sir C. Clarke and Dr. West.—Dr. DALY said that in a case of congestion of the female urethra which had resisted all treatment, the patient being for months confined to bed and suffering intense pain, he applied iodoform every day along the entire course of the urethra, and obtained a rapid cure. The application was made by filling the groove of a director with iodoform, and when the director was well in the urethra reversing the direction of the groove. He had to thank Dr. Herman for the suggestion.—Dr. MATTHEWS DUNCAN had seen many abscesses in the recto-vaginal septum, but he remembered none in the urethro-vaginal septum. Chronic urethritis he had often seen, and also some cases of urethrocele.—Dr. GERVIS, though surprised at the statement in Dr. Herman's paper as to the rarity of the condition described, could certainly only at the moment recall one case. In this the symptoms had been painful micturition, without evidence of cystitis, and pain, swelling, and tenderness referred to the vagina. On examination an abscess was found in the anterior vaginal wall in association with the urethra, and the same evening, probably as a result of the examination, which included the passage of a sound into the bladder, the abscess burst into the urethra, and the patient made a good recovery.—Mr. KNOWSLEY THORNTON had seen a few cases of the kind. He would raise the question as to whether the condition described by Sir C. Clarke was the same as that for which Dr. Emmet, of New York, had invented a special operation. If so, the condition must be much more common in America than in this country.—Dr. WYLIE (New York) said that the condition for which Emmet's operation was chiefly used was prolapse of the mucous membrane of the urethra in elderly females.—Mr. DORAN referred to an interesting case of a diverticulum in the female urethra, described by Sautesson of Stockholm, and published in the *London Medical Record*, March, 1885. The symptoms were very puzzling until the parts had been carefully explored.—Drs. GALABIN and M. HANDFIELD JONES also made remarks, and Dr. HERMAN replied.

Dr. CHAMPNEYS read a paper entitled "Observations on the Uterine Bruit." The author records a series of observations on this point, some of which have been already reported in this country, some abroad only, and some are recorded, it is believed, for the first time. The first series includes forty-six nearly continuous observations made at the General Lying-in Hospital regarding (1) the position of the maximum intensity before labour; (2) after the expulsion of the placenta; (3) the presence of pulsating arteries felt by the vagina, and the effect produced on the bruit by their compression. The bruit was heard on the left side in thirty-three cases; on the right side in one case. It was heard after the expulsion of the placenta in five cases. In all cases when heard after the expulsion of the placenta its point of greatest intensity had sunk down after delivery. In five cases a pulsating artery was felt in the vagina; pressure on it affected the bruit in one case only. The preponderance of left-sided over right-sided bruits confirms the view that the bruit is produced in the arteries as they reach the uterus or soon after, the left corner of the uterus being anterior to the right (dextral torsion). One observation concerns a case of placenta prævia, in which the bruit and the placenta were on the left side. The author analyses Rapin's and Rotter's papers, the latter of which concerns the relation between a uterine bruit heard and a thrill felt. The author records two cases in illustration of the same point, and one case in which the same observation was made in the case of a fibroid tumour of the uterus, also one in which post-mortem examination seemed to show that a uterine bruit was situated in a large sinus running over the surface of a fibroid tumour.—Dr. GERVIS asked why Dr. Champneys adopted the term "palpable bruit" to express the perception of a localised pulsation, and also whether in the course of his observations he had found corroborative evidence of Dr. Hicks's suggestions as to the effect of the uterine contractions on the characters of the souffle.—Dr. HERMAN thought that the variations in loudness of the murmur to which Dr. Gervis had referred were of much importance in its identification. There was no kind of abdominal enlargement in which a murmur having rhythmical variations in loudness was heard excepting that produced by uterine tumours. The presence of such a murmur showed that the tumour was uterine, but did not give any further information as to its nature. The murmur might be as a rule louder and the variations more marked in pregnancy than in fibroids, but he had heard murmurs over some fibroids louder than those in some cases of pregnancy. The murmur was not to be relied upon for the diagnosis between fibroid and pregnancy.—Dr. JOHN PHILLIPS asked if Dr. Champneys had any experience in vaginal stethoscopy, and if so whether it was corroborative of the hypogastric signs. He was aware that there was naturally a certain feeling of aversion to this method of diagnosis, but thought that if any facts of scientific value could be thus obtained it might be permissible or even advisable.—Dr. A. ROUTH asked how long the uterine souffle persisted (1) after labour, and (2) after the death of the fœtus in utero. He had seen a case at Charing-cross Hospital where labour had to be induced for incontrollable vomiting, in which vaginal stethoscopy proved the souffle to exist two or three weeks after the presumed death of the fœtus, which was mummified, the souffle being inaudible over the abdomen. He had frequently heard the souffle per vaginam over the cervix uteri when it was inaudible over the abdomen; and, so far as his experience went, he had found that whenever the souffle of a pregnant uterus was audible over an abdominal area it was always audible over the cervix uteri per vaginam. In one case of the souffle being heard in the abdomen over the site of a uterine fibroid, it was not audible over the cervix uteri. If this distinction of the area of diffusion of the souffle of pregnancy and of that of a uterine tumour be trustworthy, it would serve as a material aid in differential diagnosis.—Dr. W. S. A. GRIFFITH thought that the dextro-torsion of the uterus, which only occurs to a very limited extent, was by itself insufficient to explain the frequent absence of the uterine souffle on the right side. Some other explanation was wanted which would apply equally to the cases in which it was absent on both sides. The great cause of the bruit was almost certainly the passage of blood suddenly from a small into a larger channel at the junction of the uterine arteries and sinuses.—Dr. CHAMPNEYS, in reply, said that the subject was so large that he had not attempted a complete study of it; in this sense his observations were confessedly imperfect. By "palpable uterine bruit" he meant a bruit which was also palpable as a thrill. He was inclined to agree with Dr. Herman that marked rising in pitch was characteristic of the souffle in pregnant uterus rather than in fibroid. He had not used the vaginal stethoscope, as the gain was very questionable and the objections obvious. He had never

observed dicrotism in the souffle. The souffle was often musical, the various notes forming a sort of chord, and this pointed to their being produced by many vibrating bodies. He could not answer the question as to the exact length of time the souffle was audible after delivery without referring to the hospital notes. The entrance of blood from a small into a large cavity was probably the chief cause of the souffle; but there were many other sufficient causes, such as the sudden curves in the arteries, the quality of the blood, &c. It was difficult to eliminate these.

ACADEMY OF MEDICINE IN IRELAND.

Nature and Surgical Treatment of Scrofulous Cervical Glands.

A MEETING of the Surgical Section was held on April 16th, Mr. KENDAL FRANKS read a paper on the Nature and Surgical Treatment of Scrofulous Cervical Glands. The paper dealt, in the first instance, with the connexion between scrofulosis and tuberculosis. The history of the discussion regarding the identity or non-identity of the two affections was traced, and Mr. Franks showed that the conclusion arrived at up to the spring of 1882 was that the two diseases could not be separated—that they were both caused by the same virus, but that the nature of this virus had not been recognised. The discovery of the tubercle bacillus in that year had, however, settled the question, and the presence of the bacillus in all so-called "scrofulous" affections proved their tubercular nature. Thus scrofulous disease of joints, caries, cold abscesses, and "strumous" glands must henceforth be all classed under the head of tubercular diseases. Tuberculosis of the cervical glands was shown to be the result of the entrance of the tubercle bacillus at some contiguous abraded part, and most cases could be traced back to some local affection, such as eczema of the head, ulcers in the mouth, sore-throat, and so forth, all of which afforded a nidus for the bacillus. The constitutional peculiarity, the "vulnerability of tissue," was a most important factor in determining a proper soil for the development of the organism, and much depended on the dose of the poison received as to the future progress of the case. Three courses were open to the gland to pursue:—First, death of the bacillus and consequent resolution; this was not usual. Secondly, suppuration and expulsion of the tuberculous virus; this might occur in one gland after another, and was of common occurrence. Thirdly, the extension of the disease along the course of the lymphatic glands, and if this were not arrested, subsequent generalisation of the disease. Mr. Franks urged that surgical measures should be guided by our present knowledge of the dangerous nature of the disease; and that constitutional measures, which should be used in all cases, should not be trusted to exclusively, once the diagnosis as to the tubercular nature of the disease was established. He referred to three surgical measures as being the best, each of which was applicable to its own class of cases. 1. *Scooping* should be confined to cases in which a sinus already existed, or in which a superficial abscess was connected with a caseous gland beneath the cervical fascia (Teale). 2. *Cautery puncture*, recommended by Treves, was most applicable to softened caseous glands which had formed extensive adhesions. 3. *Excision*, which had the widest applicability, was chiefly suitable in cases where the glands were still hard and movable. It was applicable to extensive disease as well as to more limited cases; but he urged that it should be employed early, when practicable, before softening or adhesions were formed. It was then possible to eradicate the disease through a small opening, and thus save the patient from an extensive operation subsequently, or, if that were not resorted to, to a prolonged and exhausting process of suppuration.—Mr. THOMSON was not quite sure that surgeons could boast, what seemed to follow from Mr. Franks' assertion, that, in the treatment of scrofulous cervical glands, they had invaded territory which had heretofore been largely in the hands of the physicians. It was common experience that the physician's treatment often averted what appeared to be a threatening disaster; but there was a large proportion of cases which went to the bad, and, as to their surgical treatment, had been until lately in opprobrium. The present impetus to surgical treatment was due, perhaps, to Teale and Allbutt more than to anyone else. So far as internal treatment was concerned, he had found an extremely good remedy in chloride of calcium, given in from ten to fifteen grain doses, three times a day, continued for several months.—Dr. HENRY KENNEDY mentioned, as a surgical point worth remembering, that, having been repeatedly asked to deal with a single suppurating gland, he used simply a thread seton, passing a needle through the length of the suppuration.—Mr. CORLEY was impressed with the expediency of early removal of the glands, but not too early, because there was the chance of removing glands which probably in the ordinary course would disappear of themselves.—Dr. BENNETT regarded the incision of the glands in the neck as disastrous, it being impossible to say when the limit of operations would be reached, while there generally followed disease of a more disseminated type. He suggested that when a single gland or two happened to be engaged, and there was a difficulty of diagnosis between a scrofulous gland and a gland enlarged by irritation, the passing the point of a subcutaneous syringe into the substance of the gland with an injection of tincture of iodine would be beneficial.

On the Quantitative Estimation of Sugar in the Urine by the Polariscope.—Lichen Planus.

A meeting of the Medical Section was held on April 30th. Dr. CRUISE read a communication on the Estimation of Sugar in the Urine by the Polariscope, and demonstrated the operation with the instrument known as the Yvon-Dubosco Diabétomètre. He dwelt upon the great advantages of this method over volumetric analysis, inasmuch as it is very accurate, very easily used, and occupies only about ten minutes; while chemical determination is surrounded by errors, both possible and serious, requires special skill, and can scarcely be accomplished in less than an hour.—Dr. TICHBORNE said he was indebted to Dr. Cruise for his introduction to this instrument, and was in a position to bear testimony to the utility of this very excellent polariscope, which would be effectual in estimating the quantity of sugar in any substance. The paper issued by the makers of the polariscope stated that either charcoal or acetate of lead might be used for decolourising the urine. He thought that charcoal was not desirable because it slightly reduced the percentage of sugar. He had found that where charcoal was used the amount shown was ·85, while in the case of acetate of lead it was ·94; so that the use of charcoal involved a sacrifice of accuracy, and care should be taken not to use more acetate of lead than sufficed to decolourise the urine. Unless the fluid were perfectly bright, it could not be used; but if an over-quantity of the acetate were employed, the fluid would be rendered sensitive to the carbonic acid of the atmosphere, and would become muddy almost as quickly as it was filtered. The speaker was in the habit of adding a few drops of a solution of basic acetate of lead, the quantity being determined by the intensity of the colour of the urine; water was then added in sufficient quantity to double the volume of the urine. By this method an excess of acetate of lead was avoided, and it was only necessary to multiply the results obtained by twenty to gain the percentage. In some cases the volumetric analysis could be more relied on than this polariscopic method; but, generally speaking, the latter proved the more trustworthy in two out of three cases. In using the polariscope it was necessary to guard against fluctuations of temperature, and also too high a temperature. Each degree of Fahrenheit made as much difference as ·2 in the rate of rotation exhibited with inverted sugar, and also a considerable difference in right-handed rotation. He had found that 60° F. was the best temperature in which to use the method.—Dr. WALTER SMITH said this instrument was sufficiently accurate for clinical purposes. If great accuracy were required, the palm must be yielded to chemical methods. This optical method was not reliable for percentages of sugar smaller than ½ per cent. It was not a positive test of sugar, for it went on the assumptions that urine contained no active substance except glucose, and that the optical behaviour of glucose was the same as that of distilled water. But the first of these assumptions was not true. Of late years it had been conclusively shown that in diabetes the urine contained not only glucose, which was dextrogyrate when seen optically, but also a peculiar acid, which was lævogyrate. In such a case the amount of sugar would be represented by the difference in rate between the two gyrations. Again, it had been made out that a large class of substances, several of which were now used in medicine, passed out in the urine in

a chemical form, which excited a left-handed rotation in polarised light. This was true of a large group of bodies, including aromatic compounds, alcoholic derivatives, chloral, &c. Therefore the polariscope could not be accepted as an unerring determinant of the amount of sugar in diabetic urine.—Dr. NIXON said he agreed with Dr. Smith that strict scientific accuracy could not be obtained by the polariscope exhibited. He had for some years used the instrument of Soliel-Ventzke, of which the present one was a modification. The chief difficulties in connexion with its use were—first, the trouble it involved in decolourising the urine; secondly, that some nice manipulation was required in order to prevent bubbles of air from getting into the glass tube; and thirdly, that after each application the indiarubber washer usually got firmly attached to the glass slide, and necessitated some trouble in removing it. These difficulties, however, were got over by a little practice in the use of the instrument.

Dr. FINNY remarked upon the rarity of Lichen Planus in this country, and quoted Dr. Taylor, of New York, and Erasmus Wilson in support of the same rarity in America and England. Dr. Finny had never before met with any similar case, although for over twelve years he has had, weekly, an opportunity of studying diseases of the skin at the hospitals. The case was a very extreme example of lichen planus, as, with the exception of the head and face, the papules invaded every part of the body. The patient, Mrs. H——, aged fifty-three, had never before had any cutaneous affection. She was supposed to be rheumatic and dyspeptic. For some months her nervous system seemed to have been depressed, as she was easily tired and became irritable. On two occasions her bowels moved suddenly in the street, although she had had a natural evacuation in the morning. Her life was an easy one, and her circumstances comfortable. She consulted Dr. Finny at the end of August, 1885, for a very itchy affection of the skin, of six weeks' duration, the irritation of which had quite deprived her of sleep and caused loss of appetite. The disease began in small patches below the knees, and gradually spread, until in the first fortnight of September there was no part devoid of papules except the head and face. The eruption was, however, both as to the size of the papules and extent of the patches, greatest over the back, loins, abdomen, and vastus internus of the thigh. The papules in the palms and soles were few and scattered. The colour was very striking, being of a dull or purplish red, and resembled a papular syphilide. Each papule (2 to 6 lines) had characteristics peculiar to the disease. It was solid, free from all serous or purulent discharge, abrubtly raised from the adjoining skin, round or polygonal in outline, with sharply defined edges. Its surface was smooth, waxy, or glazy, to which, in some but by no means all instances, was attached a slight filmy desquamation. Many of the papules were slightly depressed or quasi-umbilicated. The papules formed extensive plaques, and, by their contiguity rather than their confluence, they produced a peculiar tesselated or mapped-out appearance of the skin. In such places the pigmentation of the skin was between the papules, which stood out whitish-grey on a brown-red ground. The treatment consisted in narcotics and hypnotics to procure sleep, and in the internal administration of arsenic, the dose of Fowler's solution being pressed up to 13 minims three times a day, until its physiological effects were produced; it was then intermitted, and, on resumption, was continued for a month after improvement had set in. The local remedies which gave most relief to the pruritus were warm alkaline baths and a lotion of carbolic acid and liq. carbonis deterg. Profuse diaphoresis from pilocarpine was also of use in the early stage. A fortnight after treatment by arsenic improvement commenced, and at the end of October, six weeks from the inception of its use, not a papule remained, though the skin for many weeks subsequently was deeply stained and mottled.

PLYMOUTH AND DEVONPORT MEDICAL SOCIETIES.

A MEETING of these conjoint Societies was held on March 24th, Mr. Geo. Jackson, President of the Plymouth Medical Society, in the chair.

The PRESIDENT showed a case of Ichthyosis of the Lower Lip, with Leucomatous Patches inside the cheeks, occurring in a man who had worked inside the double bottoms of ships, with no apparent ill effects at the time. He also showed Kidneys removed from a man who had complained of no symptoms of kidney disease during life. One kidney was much hypertrophied, the other atrophied, and the subject of cystic degeneration.

Dr. WILLIAM H. PEARSE read a paper on Cholera. He argued that the facts of miasmatic contagion and of the autogenesis of cholera must both be admitted, and were embraced in a greater theory of evolution. He applied Darwin's hypothesis of pangenesis to the autogenesis of cholera. He maintained that "changed" environment had been followed by cholera, and held that vito-chemical poisons evolved, after periodic intervals, from varied "shocks" or *extremes* of environment. He applied the doctrine of "continuity" to cholera, and suggested the method of coördination to those not visibly affected.

Reviews and Notices of Books.

Dictionary of Practical Surgery. By various British Hospital Surgeons. Edited by CHRISTOPHER HEATH, F.R.C.S. London: Smith, Elder, and Co. 1886.

THE success which the Dictionary of Medicine has achieved no doubt prompted the idea and led to the production of a kindred work on Surgery. This Mr. Christopher Heath has satisfactorily accomplished, with the aid of one hundred and sixteen different contributors, the majority of whom are well-known as surgeons or physicians to the metropolitan or provincial schools, many amongst them having attained the highest distinction as *littérateurs* in medicine and surgery. One of the first duties of the editor of a work of the kind before us is the selection of contributing authors, and the assignment to each, so far as may be possible, of subjects on which he is known to be especially informed, and therefore best qualified to expatiate. It is to the very judicious way in which the labour has been distributed by Mr. Heath and his coadjutors that the Dictionary of Surgery will largely owe the full measure of success which we have no doubt will be accorded to it, since a large number of its contributors are eminent authorities upon the subjects allotted them, thus adding greatly to the value of the work as a book of reference. The aim of the editor, as stated in his preface, has been to produce a compendium of the practice of British surgery, which may supply a want in the library of the busy practitioner, who necessarily often meets with cases of surgical disease or injury on which he desires to have immediate information as to diagnosis and treatment. With this view a series of articles on the diagnosis of the injuries and diseases of the several regions of the body, and general articles on Deafness, the Eye, Skin Diseases, &c., have been introduced, the subjects being treated of, so far as is practicable, in the following order: (1) Cause; (2) pathology; (3) symptoms and diagnosis; (4) treatment; and (5) prognosis. We take it that the chief advantages claimed for a Dictionary of Surgery over a system or treatise should lie in the conciseness and trustworthiness of the information supplied, and its ready accessibility by virtue of the adoption of the alphabetical arrangement of the subjects treated of; and in the present instance a further advantage may be presupposed, insomuch as the Dictionary in question is the outcome of the experience of many individuals, the editor having "exercised a general supervision," and "endeavoured to prevent the promulgation of crude theories or the inculcation of doubtful practices." With respect to the purely editorial work of compilation, faults we think there are, both of omission and commission; but on the whole it has been well done. Among subjects which are not indexed, and have no special alphabetical headings, are congenital tumours, bronchial cysts and fistulæ, congenital tumours of the sterno-mastoid, actinomycosis, caries of the ribs, and pericostal abscess; whilst we could not light upon any

reference to tropical abscess of the liver, a subject which surely comes within the domain of surgery. Again, the surgical aspects of laryngeal and pharyngeal diphtheria, and tubercular or scrofulous kidney, which in other text-books commonly receive separate treatment, are dealt with somewhat cursorily in articles devoted to other matters. Sometimes what would seem to be useless repetitions occur: for instance, in the first volume is an article on Scald of the Larynx; another may be found in the second volume headed Scald of the Glottis, occupying twice as much space as the former, written by a different author, and traversing much the same ground. A large and even superabundant amount of space has been given to descriptions of various surgical appliances and instruments, well written by Mr. Bilton Pollard, perhaps at the expense of other subjects which deserved fuller notice: for example, the article on Specula monopolises no less than five columns; whilst the general article on the Surgical Diseases of Children is dismissed in four. "Doubtful practice" has, too, sometimes found its way in. As an instance, we may cite the assertion of Mr. Paul Swain, in his article on Masturbation, that "the application of nitrate of silver to the prostatic urethra" is of service in the treatment of that most pernicious habit. We think that very few surgeons would be inclined to adopt this method, which many deem unjustifiable.

The articles are so numerous and so compressed that a detailed or systematic criticism is out of the question; we therefore can but briefly refer to those which by the fact of their importance, special prominence, or for other reasons, merit the reviewer's notice. With respect to their substance, everybody is cognisant of the difficulties which beset the editor of an encyclopædia or dictionary in which a number of writers are concerned; thus it happens that an article on which much of the author's energy has been expended in carefully eliminating unimportant passages and redundancy of words, in order that in length it may fulfil the conditions of space imposed upon him by the editor, is mercilessly cut down or ordered to be rewritten, because, like many a good picture rejected by the hanging committee of the Royal Academy, it did not coincide with a certain superficies to be covered. Yet the reader is bound to hold the unfortunate author responsible for any delinquencies discoverable in the articles endorsed by his signature, whether they be the result of editorial excision or not. In General Surgery, Professor Stokes of Dublin has written a series of valuable essays on amputations generally, and on amputations of special parts. Mr. Jonathan Hutchinson writes characteristicly and almost irreproachably on Syphilis and allied subjects. A short but highly suggestive article is contributed by Sir James Paget on Old Age. Mr. Heath writes the sections on Aortic and Innominate Aneurysm, and the Surgery of the Jaws, his special knowledge and experience in these subjects being already well recognised and appreciated, together with a general article on Abdominal Surgery. Dr. William Murray, of Newcastle, naturally treats of Abdominal Aneurysm. Diseases of the Bladder, Stricture of the Urethra, and dependent subjects have been assigned to Mr. Berkeley Hill; Tumours of the Bladder to Sir Henry Thompson; Rupture of the Bladder to Mr. Rivington; Lithotomy and Lithotrity to Mr. Cadge of Norwich, and Urinary Calculi to Mr. Crosse of the same town: these matters have been practically and thoroughly dealt with by these authors in excellent articles. The sections on Diseases and the Surgery of the Kidney have been entrusted to Mr. Arthur E. Barker. The article headed Nephritis is somewhat meagre, only covering two and a half columns; in it but little attempt is made, either in a clinical or pathological sense, to differentiate between the kidney changes and associated symptoms of the various forms of Bright's disease, and those due to retention and back pressure of the urinary excretion, or the septic decomposition of the latter. In the article on Pyelonephritis we are in some doubt as to what is meant by the phrase "the 'overflow' of bad retention": the same author's account of the operative surgery of the kidney, and also that of the pylorus, is, however, very acceptable. We do not understand why the tests for albumen in the urine are not incorporated in the article on Albuminuria, written by Mr. Mansell Moullin; they are to be found, nevertheless, fully described under that of Morbid Conditions of the Urine; in fact, the whole subject of albuminuria is there again fully gone into. Diseases of the Breast are ably discussed by Mr. Marcus Beck; and of the Testis, by Mr. Pearce Gould, who also writes admirably on Popliteal Aneurysm and other subjects. Mr. Bond subscribes the article on Railway Injuries, considered chiefly in their medico-legal aspect; whilst Mr. Herbert Page contributes an original and well-written section on Injuries of the Back and Spine. In the Surgery of War, Sir William Mac Cormac is in his element in matters relating to Gunshot, Sabre, and Bayonet Wounds; and Mr. Cantlie writes on the Ambulance, the Management of the Sick-room, with other articles on Surgical Anatomy and methods of Ligature of Arteries. The work of Mr. Treves is varied, thorough, and concisely written; he subscribes the sections headed Air in Veins, Intestinal Obstruction, Strangulated Hernia, and a number of others devoted to the Surgery of the Intestine, as well as those on Diseases and Injuries of the Lymphatics. No one more competent could have been selected as the author of the article on Cleft Palate than Mr. Thomas Smith; or on the subjects of the Plastic Surgery of the Bladder and Urethra, and Radical Cure of Hernia, than Mr. John Wood. Many other articles are equally meritorious: among them are those on Fractures, by Mr. Marsh, who, moreover, contributes an excellent section on Hip Disease; on Dislocation and Wounds of Joints, by Mr. Clement Lucas; on Injuries of the Chest and Lung, by Mr. Howse,—to the same writer being apportioned the subjects of Femoral Aneurysm and Gastrostomy; on Empyema, by Mr. Godlee; on the Treatment of Wounds and other collateral subjects, by Mr. Sampson Gamgee; on Congenital Dislocations, by Mr. George Cowell; on Tetanus and Diseases of the Rectum, by Mr. McCarthy; on Erysipelas and allied subjects, by Mr. Pickering Pick; and on Diseases of the Tongue, by Mr. Morrant Baker. There is little to find fault with in the contributions of Dr. William Macewen of Glasgow on Osteotomy, Grafting, and those relating to Head Injuries; but might not the indications and methods of trephining for meningeal to hæmorrhage have been more precisely set forth? Mr. Barwell's views of the pathology of Scrofula are somewhat out of fashion; his notion that "rachitis is probably a scrofulous affection in the large majority of instances" will, we are inclined to think, hardly meet with general acceptance. In marked contrast to this writer's views of the relations of scrofula to tubercle, are those expressed in a carefully written article by Mr. Makins on Surgical Tuberculosis. It may be mentioned here that, whilst Mr. Makins fully considers the subject of tubercular diseases of the joints in their varying aspects, mainly of course from a pathological point of view, Mr. Warrington Haward, in his general article on Diseases of the Joints, which in other respects is excellent, gives no special designation to this class of cases; but, using the term "scrofulous," he apparently includes in that category those affections of the joints which are now classed as tubercular, and makes no reference to the fact that the bacilli of tubercle are demonstrable in the diseased structures connected therewith. Mr. Pepper writes with remarkable perspicacity on a variety of subjects. Mr. Victor Horsley may be said to be ubiquitous; but, although precise and

accurate in his terminology and classification of septic processes and organisms, he is not always practical. It would be invidious not to mention the names of many writers who have done good work often in matters of minor import: such as Mr. Watson Cheyne, Mr. Boyd, Mr. Ballance, Mr. Golding Bird, Mr. Bellamy, Mr. Davies Colley, Mr. Clutton, Mr. Morgan, Mr. Mason (so lately deceased, and who wrote the article on Nævus), Mr. Dent, Mr. Symonds, Mr. Johnson Smith—the general subeditor,—and others. A commendable feature of the Dictionary is the introduction of sections upon Regional Diagnosis and Surgical Anatomy; they are, as a rule, trustworthy and practical guides. In more special subjects, Mr. Robert W. Parker and Mr. Owen have appropriately been assigned the greater number of the articles on the Surgery of Childhood; Dr. Barlow and Dr. Gowers write on Cranio-tabes and Pseudo-hypertrophic Muscular Paralysis respectively; whilst Mr. Henry Baker treats of Tenotomy and Club-foot: in the article on the latter subject, only a few lines are devoted to the pathology of the congenital variety, which the writer believes "to be due to disordered nervous function acting upon the muscles, which draw the foot into its deformed position"; and we think that the comparatively recent investigations of Messrs. Parker and Shattock into the pathogeny of this affection might at least have been referred to by the author. Gynæcological Surgery could hardly have been better cared for than in the hands of Mr. Knowsley Thornton and Mr. Doran. Diseases of the Larynx and Thyroid Gland have been assigned to Dr. Semon; of the Ear to Messrs. Field, Purves, and Cumberbatch; of the Teeth to Mr. Tomes. Dr. Stephen Mackenzie discourses on Chyluria and Filaria Sanguinis Hominis; Mr. Shirley Murphy on Vaccination: so that it will be seen that topics which are but on the threshold of surgery have been admitted to a place.

The value of the Dictionary is much enhanced by the incorporation of a series of essays on Ophthalmology and Dermatology; both subjects are treated with a completeness notably absent in some of the other more special departments. The articles, though often widely separated, really form a connected whole, and, for the most part, attain to a high standard of excellence. Mr. John Tweedy has supervised the articles on Affections of the Eye, and Dr. Robert Liveing those on Diseases of the Skin, than whom Mr. Heath could hardly have found two more capable coadjutors. In matters relating to the eye, a number of ophthalmologists are associated with Mr. Tweedy, whose names are a sufficient index of the character of the work done by them; they include Mr. Lawson, Mr. Power, Mr. Brudenell Carter, Mr. Priestley Smith, Mr. Marcus Gunn, Mr. Berry of Edinburgh, Mr. Charnley, and others. All have brought a large, and often special, experience to bear upon the subjects with which they are connected, and much new and original matter may be found scattered through their several articles; the most obvious fault to be found with the latter is that they bear some evidence of undue compression. Two exhaustive and interesting articles may be referred to here: one by Mr. Herbert Page on Disorders of Vision from Injuries of the Head and Spine; another by Mr. Rivington on Orbital Aneurysm. In matters dermatological Dr. Liveing has written largely and instructively himself, his colleagues being Mr. Malcolm Morris, who in an important contribution identifies himself with the subject of Lupus, Dr. Cavafy, Dr. Radcliffe Crocker, and Mr. Alfred Sangster.

An adjunct of great utility is the insertion of a full index at the end of Vol. II., whereby subjects which have received no separate heading but are discussed in another place, and would thus be difficult to light upon, are at once easily discoverable. The Dictionary takes the form of two conveniently sized and well-bound volumes, the type employed, though small, being clear and legible.

Mr. Heath is to be congratulated on the accomplishment of a work which, on the whole, is one of high merit, and alike creditable to himself and to the majority of those who have been associated with him; and the more so, since the compilation of the Dictionary progressed notwithstanding a severe and prolonged illness—terminating, happily, in complete recovery—which overtook him after he had commenced his editorial duties. We cannot close this brief review without expressing our admiration of the energy and perseverance which, amidst so many difficulties, have brought an arduous and anxious undertaking to a satisfactory and successful conclusion.

New Inventions.

GENERAL ANÆSTHETIC INHALER.

FEELING somewhat dissatisfied with all the anæsthetic inhalers at present in use, Messrs. Arnold and Sons, West Smithfield, E.C., have most ably made for me a "General Anæsthetic Inhaler" according to my instructions, as depicted in the accompanying woodcut. This may be termed a good "all round" inhaler, as it can be used for nitrous oxide gas, chloroform, ether, alcohol, or methylene bichloride, given either separately, mixed, or successively, as may be desired. For instance, you can begin with NO and continue with ether; or administer chloroform, and, in the event of signs of syncope, add a fluid drachm of ether or alternate one with either of the others as may be thought proper. Besides the above it possesses the following advantages:—1. A free influx of air as well as a free outlet. 2. A

good indiarubber cushion attached to the base, so as to fit any kind of face. 3. The use of plates or diaphragms (represented by dotted lines) turned up on the free edge so as to prevent the anæsthetic fluid from dropping down on the patient's face, of which the lower one serves to prevent the reinsufflation of expired air and directs it to the outlet, whilst the upper and middle ones are so placed as to receive the inhalant in any position of the patient and diffuse it over as broad a surface as possible for volatilisation, which is also accelerated by the warmth of the hand of the administrator. 4. Either of the funnels can be used according to position.

F. FAWSON LEE
Salisbury, May 12th, 1886. M.B. Lond., F.R.C.S. (exam.)

MERCURIAL FUMIGATOR.

THE accompanying illustration represents a method for treating locally syphilitic sores of all kinds in all situations. Into the iron kettle is introduced about a drachm of calomel, the stopper replaced, and the spirit-lamp lighted. After waiting a few minutes for the kettle to be well heated, on

working the bellows a stream of mercurial vapour can be directed against any desired spot, and a film of metallic mercury will then be deposited over the surface towards which the nozzle of the kettle is directed. The mercury can thus exert a very powerful local action, not merely from its

being in a state of such extreme subdivision as it must be when deposited from its vapour, but as it is just free from its combination with chlorine it is in the nascent state. This mercurial fumigator may be used for primary sores, condylomata, tertiary ulcerations, &c.

W. H. FENTON JONES, M.D.

Brook-street, Grosvenor-square, W.

MODIFIED BEAUFORT LEG.

THE chief object of this modification of the Beaufort leg is the praiseworthy one of placing an artificial instrument within the reach of those who cannot afford the more expensive appliance. The sample that has been submitted to our judgment appears to possess all the necessaries for a useful and artistic artificial limb. It is light in weight, has practically all the advantages of its prototype, and its strength is guaranteed by the presence of long lateral steel splints worked into the leathern substance of the appliance. The instrument, which is manufactured by Mr. Schramm, of Princes-street, Cavendish-square, should therefore prove of great durability. The cost, ranging from £3 10*s.* to £4 10*s.*, is considerably less than that of the original.

"GUNTHORPE" NATURAL MERINO HOSIERY.

THE increased attention which is now being given to clothing, not only as a means of comfort, but as an auxiliary to health, is one of the satisfactory indications of the progress of sanitation amongst all classes of the public. A new candidate for popular favour as a desirable covering for the body is "Gunthorpe"—a material of which samples in various articles of dress have been submitted to us. The fabric is remarkably light and clean-looking, soft and pleasant to the feel, and is said to be not subject to shrinkage even by washing; but the chief advantage claimed for it is that it is entirely free from any kind of dye, which is often injurious to delicate skins. We have no hesitation in commending "Gunthorpe" as healthful and comfortable wear. The manufacturers are Rogers, Black, and Co., of Nottingham and Aldermanbury; and the agents are Bates, Hendy, and Co., 37, Walbrook E.C

NEW SANITARY COOKING UTENSILS.

MR. KEEN has designed a ventilating cover for kettles, saucepans, &c., which serves a very useful purpose. By giving opportunity for steam to escape and at the same time preventing the admission of soot, the contents are permitted to boil and gaseous impurities to escape without risk of damage by exposure to smoke. This method not only relieves the cook of the necessity for constant attention to prevent the contents from boiling over, but it is claimed for it that it has a relation to health in promoting their purity. However this may be, there is no doubt that the flavour of vegetable and animal matter is affected by their boiling in a close atmosphere, and Mr. Keen's invention overcomes this difficulty.

THE PREVENTIVE TREATMENT OF SYPHILIS.

To the Editor of THE LANCET.

SIR,—The following case is of interest, as showing how syphilis may be prevented by prompt local and general treatment before the chancre has arrived at maturity.

Early in November, 1885, Mr. A. B. C. consulted me for an eczematous affection of the skin, which itched intensely, associated with a few papules and vesicles, the eruption being sparsely scattered over the loins, buttocks, back, and upper arms. An aperient was prescribed, and glycerole of lead applications were ordered, but on Nov. 11th the disease remained *in statu quo*. The aspect of the dermatitis, in part, suggested scabies, but the integument was healthy at those points which are specially prone to become the seat of scabies—viz., the clefts between the fingers and the flexures of the wrists. Moreover, the sarcoptes hominis was not detected microscopically, after careful search in the ordinary manner. The case was further complicated by the recent appearance of a hard, elevated nodule, the size of half a pea, with an inflammatory zone around, situated on the dorsum of the penis immediately behind the corona in the median line. There was a history of impure contact, and nearly three weeks previously the covering of the penis had become abraded during coitus at the precise spot where this small nodule had developed during the past three or four days. The lymphatic glands in both inguinal regions were slightly enlarged. The physical condition of the lesion on the penis led me to consider it a hard chancre not yet arrived at maturity, and, being immature, the prompt destruction of the chancre might arrest the elaboration of the syphilitic virus at the point of inoculation, and its absorption therefrom. Accordingly, the chancre and surrounding parts were freely painted with a solution of hydrochlorate of cocaine, to ensure anæsthesia, and the chancre was destroyed with Pacquelin's cautery. I suggested that Sir William Jenner's opinion should be sought with reference to the skin affection. On Nov. 12th, Sir William considered the dermatitis due to scabies, and that its origin around the loins and buttocks was caused by contagion implanted during congress coincident with the receipt of the syphilitic virus. He suggested the application of sulphur ointment to the affected skin, and thought that the free exhibition of mercury internally was also advisable in order to combat the effects of any portion of syphilitic virus already absorbed. This treatment was fully carried out, and the dermatitis quicky disappeared. The sore on the penis healed under iodoform dressings. The internal use of mercury was discontinued after six weeks, the patient soon regaining his usual health, and none of the secondary manifestations of syphilis have appeared. The success which followed the destruction of the chancre in this case by Pacquelin's cautery, with the simultaneous employment of mercury, leads me to strongly recommend this course for syphilis, *before the chancre has arrived at maturity*, in preference to the opposite plan adopted by so many—viz., that of waiting for the appearance of secondary manifestations before commencing anti-syphilitic treatment. The use of cocaine is invaluable, as rendering the caustic application painless. I am, Sir, yours faithfully,

CHAS. E. JENNINGS, F.R.C.S. Eng.

Park-street, Grosvenor-square, W., *May* 22nd, 1886.

THE LANCET.

LONDON: SATURDAY, JULY 17, 1886.

THE Commissioners in Lunacy having been pressed by the Home Office to produce their Report for the year 1885 somewhat earlier than usual—that is to say in a reasonable time—have accomplished this feat by the postponement of certain of their tables until next year. The Report, as issued, opens with what we must assume to be a tribute to the memory of Lord SHAFTESBURY, but the biographical sketch is meagre, even for an official notice, and the expressions of appreciation and regret have neither elegance nor eloquence to recommend them. However keenly the Board may feel the loss of its late Chairman, it is clearly not so overwhelmed by affliction as to be incapable of making political capital out of the event. The recollections of Lord SHAFTESBURY most cherished at Whitehall would seem to be those which relate to the opinions he held and the steps he saw fit to take as an opponent of lunacy law reform. Except in so far as it may be convenient—or not inconvenient—to the Board that the existing statutes affecting the custody of lunatics should be modified in a few quite unimportant particulars, the Commissioners are stoutly antagonistic to any change, and they look upon the views and acts of their late Chairman as so much material with which to carry on the war against those who would reconstruct the entire system, bringing it into harmony with the needs and interests of the insane and the sane as they stand related in the general as well as the asylum population. The spirit of red tape and officialism is rampant in the Fortieth Report of the Commissioners, and even more demonstrative than in the reports which have preceded it.

The number of lunatics known to the Commissioners on January 1st, 1885, was 79,704; the number recorded for 1886 is 80,156, an increase of only 452, although the estimated growth of the population has been from 27,499,041 to 27,870,586, or 371,545, so that the "increase of lunacy," as far as the Commissioners are informed, amounts to about 1 in 823, the total proportion of known lunatics to population being about 1 in 349. As to the details of this aggregate number, the Commissioners say: "The total number of lunatics on January 1st last—namely, 80,156—was composed of 7792 of the private class (3968 males and 3824 females), 71,663 paupers (31,586 males and 40,077 females), and 701 'criminals' (533 males and 168 females)." The particulars of the change of numbers they give as follows: "These figures show, as compared with January 1st, 1885, an increase of 41 (18 males and 23 females) of the private class, an increase of 448 (253 males and 195 females) among the paupers, and a decrease of 37 (23 males and 14 females) in those classed as 'criminals.' The total increase of the year, 452, is much below that of any of the preceding twenty-seven years, to which these returns extend." This should dispose of the notion that there is an increase of lunacy. The notion has been preposterous from the outset. The institution of a system of classification and record in relation to the insane has resulted, as it was likely to result, in gradually bringing the unsound of mind under the notice of the public. Many circumstances have conduced to make this work progressive, and there has consequently been an increase of registered lunatics; but we see no reason whatsoever—and we have never discovered any reasonable ground—for supposing that the actual number of occurring cases of insanity has increased year by year more rapidly than the population. The ratio per 10,000 of total lunatics to the population, as given in the Commissioners' table for 1859, was 18·67. This ratio of known lunatics has steadily increased, until in 1885, last year, it reached 28·98. This year it is 28·76, a fraction lower; yet there has, we maintain, been no increase of occurring cases, the apparent increase being due to the more extended recognition of lunatics and to the fact that their lives have been prolonged by more humane and careful treatment, so that the same inmates of asylums are counted in a larger, and increasing, number of annual returns.

There is nothing to note in the Report just issued beyond the facts that in the county and borough asylums the recovery rate has slightly increased, being 2·4 per cent. above the average rate of the previous ten years, and that the proportion of deaths to the daily average number resident is rather less than the average of the previous ten years. For the rest, beyond irrelevant remarks antagonistic to the several Bills which have been brought in with a view to remodel the laws affecting lunatics, and to afford better safeguards against the confounding of eccentricity or delirium with insanity which renders the sane liable to be placed under treatment as lunatics, the Commissioners content themselves with the recital of statistical and general facts. When, if ever, the obstacle to much-needed reform is successfully overcome, the reports of a Commission acting under conditions more consonant with the public welfare and conducive to the medical treatment of the insane than those which exist may be of higher value and interest.

IT may be well to revert for a few moments to the question of Direct Representatives and the election of them under the conditions of the Medical Act recently passed. The more compact and correct the general ideas of the profession on this subject the better will be the result of the election which is to take place about November. A little more discussion before proceeding to select persons is to be encouraged for several reasons. The duty to which registered members of the profession will shortly be called is an entirely new one. It is one in which they have had no previous experience, and in reference to which there are no precedents. Registered medical men are a busy, preoccupied body, consisting of 25,993 persons. For this purpose there are no organisations in the profession. There are associations and societies of various kinds, but not for the purpose of promoting such elections as are contemplated under this Act. Nor would the profession like any association to assume a caucus function, and dictate to it the selection of persons; and yet it is evident that without some concerted action in the different parts of the kingdom much time and influence will be wasted, much disappointment caused, and possibly much discredit accrue to the principle of direct representation. There are many critics who have hitherto been no friends to direct representation,

and who have always declared that the election by vote would be an unsatisfactory and undignified proceeding. The strength of this feeling in quarters where better things might have been expected is almost incredible. It is of great moment that it should receive no confirmation in the coming election.

We have, in a previous article, discussed the kind of duties which, under the sharp limitations of an Act of Parliament, the Council has to discharge. We need only now mention them. It has to supervise medical education, to inspect or visit medical examinations, to issue from time to time the British Pharmacopœia, to keep a correct Register, and occasionally to sit in judgment on registered practitioners "accused of infamous behaviour in a professional respect."

One thing ought to be kept in mind—the fewness of the Representatives required by the Act. The 17,109 practitioners of England can only choose three representatives, the 4703 practitioners of Scotland one, and the 4186 practitioners of Ireland one. Five persons to represent 26,000 is a small number, and, within reasonable limits, the fewer the persons selected and nominated by the profession the better. It is of no use scattering votes over a promiscuous number of candidates unlikely to be elected. Two or three great points, it seems to us, should guide the profession in their selection.

First it seems desirable that a great community like that of England should have something like a territorial representation. The great district of the North of England, of the Middle, and of the South or Metropolitan district, might fairly expect to carry, respectively, a representative of their own selection, and to this end should take prompt and combined local action. How are men in London to judge for the men of Newcastle-on-Tyne, and *vice versa?* We adhere strongly to our view that the candidates should be representative of the body of the profession. The consultant class, the official members of universities, and medical corporations are represented already, and over-represented. All the wisdom and counsel to be got from them is already secured. The election of such members of the profession as direct representatives would seem to us a mistake of the first order. What is conspicuous by its absence in the discussions of the Council is the contribution of men who do the hard work of the profession, who know by experience the weak points in our medical educational system, in the Register and in the Pharmacopœia, and who may be trusted to maintain the honour of the profession.

THE lecture on Ataxic Paraplegia delivered by Dr. GOWERS last session at University College Hospital is a model of what a clinical lecture should be; and as it deals with a disease which has not yet received at the hands of the profession the attention to which its frequent occurrence entitles it, we propose to indicate its chief features, whilst recommending its detailed study in the pages of the last two numbers of THE LANCET.

A good gait is characterised by the exhibition of a certain amount of force and a certain degree of harmonious action of the muscles concerned in walking. Ataxic paraplegia, as its name implies, spoils both the power and the coördinate action of walking. On the one hand it is allied to locomotor ataxy, on the other to paraplegia; but it is not a simple combination of the two diseases, for it differs in some features from simple paraplegia, and still more remarkably from tabes dorsalis or locomotor ataxy. Though the development of incoördination separates it sharply from paraplegia, still the number of differences between it and tabes dorsalis is perhaps the most characteristic fact. The prominent feature of the etiology of tabes dorsalis is the very frequent history of syphilis; this is wanting in the causation of ataxic paraplegia. Like so many of the chronic diseases of the spinal cord, we find "cold," concussion, and mental distress, with over-exertion, playing a large share in the chapter of antecedents. But the real causes mostly elude detection, though it is very probable that the nervous protoplasm of affected individuals never was in that vigorous state of health which is the possession of the bulk of mankind. The clinical course of the majority of cases is one of a very gradual, not to say insidious, kind, and consists in the concurrent development of the two symptoms, weakness and unsteadiness, mostly manifested in the lower extremities. "As soon as the patient is conscious of weakness he is conscious also of unsteadiness." At first sight the patient looks as if he had locomotor ataxy, but an examination of the knee-jerk gives this appearance an active denial, for instead of WESTPHAL'S phenomenon, the knee-jerk is increased, and, what is more, a marked foot-clonus may be obtained, and even also a clonus of the rectus femoris muscle. This exaggerated state of the "myotatic irritability" gives the affection its resemblance to spastic and simple paraplegia. But it is not in the state of the reflex actions alone that differences are to be found, for there exists a remarkable absence of those sensory symptoms which make the clinical picture of tabes dorsalis what it is. The "lightning-pains" are as dominant in the clinical history of tabes as they are inconspicuous in that of ataxic paraplegia; and the same holds good of the other sensory phenomena. The superficial reflexes, as from the sole of the foot, are also present and excessive in the great number of cases. Again, though it is common to note absence of the reflex action of the iris to light in tabes, the "Argyll-Robertson" pupil is seldom present in ataxic paraplegia.

"As the disease increases the muscular power becomes more and more impaired, usually without much increase in the incoördination, which sinks into the background as the paralysis increases, and the patient has to have recourse to supports which at the same time afford him guidance. The increased myotatic irritability continues; stiffness and rigidity develop as its consequence. Thus the aspect of the patient comes to be that of spastic paraplegia, the feet drag as the patient walks, shake from clonus when he stops, and the legs are hauled forwards with visible effort at each step." Those who know most of the mode of gait in disease will recognise the hand of the master in this description.

In the absence of the various crises of the different viscera so much associated with tabes we have another difference in ataxic paraplegia; this goes side by side with the general want of sensory phenomena.

The prognosis is, on the whole, less distressing than the general run of spinal diseases, but chiefly in the circumstance

that the affection has little tendency to cause death, and progresses in so gradual a fashion.

The pathology of the malady possesses several features of considerable interest. The anatomical distribution of the lesion is suggestive of many problems in the physiology of the spinal cord. The sclerosis or chronic degeneration occupies the lateral and posterior columns. The disease of the lateral or rather pyramidal tracts may be held responsible for the weakness, and that of the posterior for the ataxy. But the whole story is not so simple. As the clinical course shows and the anatomy corroborates, we have not a simple mixture of tabes dorsalis and spastic paraplegia. In the first place, the sclerosis is not so marked in the postero-external column as it is in locomotor ataxy, and the lesion is much less evident in the lumbar region. Moreover, there is not that strict limitation to the different "systems" of the cord. In the lateral columns the sclerosis is not accurately mapped out by the pyramidal tracts, for the lesion usually extends in front of and to the inside of these; it may even involve the direct cerebellar tract.

The mechanism by which the coördination of muscular movements is brought about has been considerably elucidated by the study of tabes dorsalis and ataxic paraplegia. The facts connected with these two diseases also show that this mechanism is probably of an even more complex nature than many of us may have been inclined to suppose. The matter, indeed, is too complicated for a full discussion of it here. Briefly, we may say that Dr. GOWERS believes that the principal agent in the production of the ataxy of tabes dorsalis is disorder of the true sensory nerves of muscles which have been shown to exist by TSCHIRJEW. The evidence on this point is very strong. We may have all the symptoms of tabes dorsalis when the cord is healthy and the peripheral nerves alone are diseased. Further, the symptoms of ataxy may exist in perfection when there is no defect in the cutaneous sensory functions. Therefore the ataxy must be due to disease of the sensory nerves of muscles. "It is probable that a very slight affection of these nerves abolishes the knee-jerk, a greater degree causes ataxy, and a still greater degree is required to render the muscles insensitive to pressure and tension." It is thought likely that disease of the posterior median columns may cause ataxy by preventing the proper transmission of the guiding impulses to the cerebellum; for the nucleus in which the fibres of this column end is in close communication with the cerebellum. Moreover, as Dr. TODD believed, the posterior columns probably contain short fibres connecting the posterior grey matter at different levels, and disease of these may also impair coördination. The theory that muscular anæsthesia was the chief cause of incoördination in tabes was advanced thirty years ago by Dr. RUSSELL REYNOLDS.

To return to the explanation of the weakness of ataxic paraplegia. It seems that this symptom cannot always be explained by the amount of sclerosis in the lateral columns. Dr. GOWERS is the author of an ingenious hypothesis which may throw light on this and cognate matters. He believes that the terminations of the pyramidal fibres in the grey matter of the cord may be compared in many ways to the terminations of the motor nerves in muscles; that there may be a kind of "motor-plate" in the ending of what he calls the upper motor segment. These terminal ramifications are supposed to act as local inhibitory centres. As this ramification is at the furthest possible point from the source of nutrition (i.e., the large nerve cells in the motor region of the cerebral cortex), it is reasonable to suppose that, in the event of a defective nutrition of the said source of trophic influence, the most distant portions of the pyramidal fibres would feel the defect first and most. If such an event occurred, then the local inhibition would cease, and weakness of voluntary movements with exaggeration of the myotatic irritability would occur. Possibly this is the explanation of long-lasting cases of hysterical spastic paraplegia that ultimately recover. The hypothesis will also serve to elucidate those cases of genuine ataxic paraplegia in which the sclerosis is almost absent from the lateral columns; for we may then imagine that the termination of the pyramidal fibres in the grey matter is degenerated.

The differential diagnosis of ataxic paraplegia has to be made from tabes, spastic paraplegia, hereditary ataxia, focal myelitis with its consequences, and tumour of the middle lobe of the cerebellum. Enough has been said to show how the first two may be differentiated; hereditary ataxy presents no knee-jerk, but nystagmus and some defect of articulation; whilst its onset in earlier life and in several members of the same family are distinctive features. From the fourth condition, in the nature of things, the diagnostic problem is of the greatest difficulty, and Dr. GOWERS thinks that the regressive tendency of myelitis, as contrasted with the progressive character of the lesion in ataxic paraplegia, is the chief means of distinction. The common accompaniments of cerebellar tumour should prevent any mistake on this score.

THE Town Council of Gravesend have unanimously decided not to build a hospital for infectious diseases on a site which they recently acquired for that purpose at a cost of £700. And they have taken this step in the face of a report from their own officers that their existing wooden hospital is so dilapidated that it had probably led to fatal results in some patients admitted, and that it is not worth repair. The real ground of objection to proceed is because, after certain conferences with the Local Government Board, the estimated cost has risen from £3500, which the Mayor regarded as sufficient, to about £5000; and a strong feeling in the direction of local self-government having influenced the members of the Town Council on the occasion in question, the intervention of the Central Authority was resented, and the scheme was abandoned. Such a result is very much to be regretted, and this especially in the case of Gravesend, lying as it does at the entrance of the great port through which disease may so easily make an entrance from abroad. And not only so, but Gravesend has already had experience of what it is to be unprepared to deal promptly with cases of imported infection.

But the main question to be considered is that of the intervention of the Local Government Board in such matters. As to this, we cannot but think, from a perusal of the proceedings of the Town Council, that some misapprehension exists. There is absolutely no reason why the Town Council of this or of any other town should not build and equip an infectious diseases hospital quite independently of any interference on the part of the Central Authority; although we are

bound to admit that, having regard to the experience possessed by the officials at Whitehall on this subject, the money of the ratepayers would, apart from conference with those officials, not be likely to be spent in the most approved fashion. It was Gravesend itself that sought the intervention of the Local Government Board when they asked that department to take part with them in the proceedings necessary for the raising of a loan to defray the expenses of a hospital. How far it may be desirable for a Central Authority to enable a local authority to secure money for certain specified purposes, without inquiring how that money is to be spent, is a question which may admit of more than one answer. But if there is any justification for a refusal on the part of the Central Authority merely to act as a medium for securing a loan for the local authority, without regard to the method in which it will be applied, it is essentially in the case of hospitals for infectious disease that such a refusal should be made. A vast amount of mischief has been done by infectious disease hospitals, and this especially in the metropolis, where those institutions have been erected by the aid of public loans, and the Local Government Board have learned through their medical staff that there are many dangers, in excess of those hitherto contemplated by sanitary authorities, which have to be avoided. And unfortunately these dangers can only be properly avoided at a cost exceeding that which has heretofore been regarded as sufficing for such hospitals. A lessened number of patients per acre, an increased distribution of buildings over the site, a comparatively wide zone between the hospital buildings and its boundary wall, are all needed in the interests of the community whom it is intended to protect against infection; and these and other similar requirements cannot be ignored by the Local Government Board when their co-operation in the erection of an infection-hospital is asked. But we have heard of recent cases in which, whilst these points have been carefully attended to, no objection whatever has been made to a sanitary authority making only a first instalment of hospital provision; and it seems to us that if Gravesend be really prepared to spend some £3000 on hospital buildings, there ought to be a means by which this expenditure may be made to provide at least a part of such a hospital as will be free from any medical or other objection. On this basis we hope the subject will be reopened; and if this be done, we have no doubt that the district can be provided with a most useful, though not a complete, amount of accommodation for the isolation of the infectious sick, and the consequent protection of the inhabitants of Gravesend. If the Town Council still wish to be free from all interference in the matter, they have only to erect their hospital out of current rates; but in view of the experience of the metropolis, we would counsel them not to proceed in this direction without at least studying the effect which other hospitals have had over a somewhat wide area when those buildings have been used for the isolation of cases of small-pox.

MR. SAVORY'S re-election to the presidency, while generally looked forward to, came as a surprise to many, on account of the well-known objection of the Council to depart from custom. We must congratulate the Fellows and Members on this evidence that the Council is at last waking up to a proper sense of its own dignity, and to the feeling that the highest honour which the College has at its disposal is no longer to be bestowed on whomsoever happens to be the senior member of Council who has not passed the chair. This interference with routine, however, is sure to press harshly on someone. Mr. SAVORY'S re-election will appear somewhat in this light to Mr. WOOD, who, in the ordinary course of events, would have succeeded to the honour of the presidency. No disrespect of any kind could have been intended to the senior Vice-President, Mr. WOOD; neither Mr. SAVORY'S re-election nor the election of two new Vice-Presidents for the current year should be regarded otherwise than as a determination on the part of the Council, at length, to break with an old and undignified tradition. We trust the practice will be continued, and thus the Council will always have a certain number of past vice-presidents from among whom to select the gentleman who promises to make the best president. We cannot but hail these changes with satisfaction, as harbingers of reforms to come, and as the commencement of a more enlightened policy on the part of the Council of the College.

Mr. MACNAMARA'S resolution "that, in pursuance of the resolution of the Council of the 9th April, 1885, the Committee on the Mode of Election to the Council and on other matters relating to the Charters and Bye-laws of the College be requested to report, with as little delay as possible, on the steps taken by them in reference to the preparation of the new sections required in the charters and the formulæ for new bye-laws to give effect to the resolutions of the Council respecting them," we are pleased to find, was carried. This will bring into renewed activity the Associations of the Fellows and Members respectively, each anxious to secure a fair representation of their own views and interests in any new charter and bye-laws which may be enacted. The Fellows have already drawn up their suggestions and recommendations, and these have been discussed several times in our columns. It now only remains for the Members to do the same. Let us recommend moderation on the one hand and expedition on the other. It would seem very desirable that a further public meeting of the Fellows and Members at large should be held to consider these recommendations, and to learn exactly what the Council of the College proposes to do before application is made to the Privy Council.

The present is the Jubilee Year of Her Majesty the QUEEN, and will doubtless bring some signal honour to the College. No time could be more propitious, therefore, for the introduction by the Council of wise and liberal reforms into the charter and bye-laws of this Royal College. It is much to be wished that whatever changes the Council desire to make will find favour with the entire constituency, and will secure unanimous support. We can only hope that such changes as may be enacted will be conducive to the general advancement of the College, and of the art and science of surgery.

WE have read with much regret a correspondence in *The Times* which has arisen out of the occurrence of some cases of diphtheria in the Charterhouse School at Godalming, and the action of the school authorities in the matter. From the letter of Mr. CARRITT, the father of one of the boys in the school, it appears that his son was very properly directed by

his house master to inquire whether there would be any objection to his going home for the usual Saturday to Monday exeat, as there had been some cases of measles in the house. Consent having been given, Mr. CARRITT learned from his son that in addition to the measles there had been two cases of diphtheria. Doubtful of the accuracy of this report, the boy's mother wrote to the house master for information, but received no answer to her letter. Hearing from her son on his return to school that one of the boys had died, she wrote again, but with no better result. Naturally dissatisfied with this, Mr. CARRITT and his wife went to the school to make personal inquiries, when they ascertained that there had been nine cases of diphtheria in the school, that one boy had died in the house in which their son was placed, and that there was another boy in it recovering from the same disease. With natural anxiety for his son's safety, Mr. CARRITT applied to Dr. HAIG-BROWN for permission to withdraw him temporarily from the school, but was informed that if he did so the boy would not be allowed to return. Acting on the opinion of his medical adviser, Mr. CARRITT felt it his duty, notwithstanding this intimation, to take his son home, and then wrote to Dr. HAIG-BROWN to ask whether he really intended to carry out his threat of not permitting the boy to return, and received a reply that he could make no other answer than that already given. Mr. CARRITT then wrote to *The Times*, giving a temperate account of the affair and protesting against the head master's arbitrary proceeding. This drew a letter from Dr. HAIG-BROWN to the editor, with a view to relieve any anxiety which might have been created, in which he stated that "during the last two months we have had two cases of diphtheria and seven other cases of throat ailment with diphtheritic tendency. To our great sorrow, one boy died of the consequences of diphtheria at a time when we supposed his recovery to be assured. No fresh instance of such illness has occurred since June 13th, and there is none such in the school now." At the same time he declined to answer anything in Mr. CARRITT'S letter referring to his conduct. We regret to think that Dr. HAIG-BROWN has taken up a very false position in this matter. As head master he must reign supreme in the school; but this does not relieve him from the responsibility of acceding to reasonable requests on the part of parents when the health, possibly the lives, of their children are concerned, nor from the obligation to give them some explanation of his reasons for adopting so unusual and high-handed a course as he seems to have done on the present occasion. We think also some explanation is required of the discourtesy on the part of the house master in not answering the two letters addressed to him by the boy's mother. In connexion with this correspondence several important collateral questions arise. We have no information as to whether the diphtheritic illness was confined to one house or was spread generally over the school; nor whether any, and, if any, what steps were taken to secure the separation of the sick from the healthy. It would also be important to know what has been done with a view to trace the cause of this outbreak, and what measures are proposed to prevent the recurrence of such a disaster. The head master may rest well assured that the best course to relieve the anxiety of parents and restore the confidence of the public in the school will be to make a clear statement regarding the extent to which disease has prevailed among the boys, the measures which have been adopted to prevent its spread, the steps taken to ascertain its cause, and the course already pursued, or in prospect, to improve the sanitary condition of the establishment. We cannot but feel that when the question was very properly asked with regard to the return home of the boy from a house in which there were cases of measles, the fact that the existence also of diphtheria was concealed is very unsatisfactory and calls for some explanation.

Annotations.

"Ne quid nimis."

THE MINUTES OF THE GENERAL MEDICAL COUNCIL.

Now that the profession is to have five voices in the Medical Council it may be expected to show more interest in the proceedings of this body. A volume of Minutes—the twenty-third—has just been issued. It is one of more than usual interest, and conveys more than the ordinary information as to the ways of the Medical Council and of the bodies which are responsible for granting degrees. The reports of the Visitations of all the universities, and of the answers of the universities to the criticism of the Visitors, are contained in one of the appendices of this volume; and another appendix contains the second report of the Statistical Committee, furnishing an instructive summary of statistics regarding medical students registered as commencing their medical studies in the quinquennium of 1871-1875. The volume can be purchased either at the office of the General Medical Council, 299, Oxford-street; or from the publishers, the Messrs. Spottiswoode.

EXTENSION OF THE CHOLERA EPIDEMIC.

CHOLERA has, during the past week, made considerable ravages in Southern Italy, the daily number of cases and deaths in the province of Brindisi having steadily risen from some 30 and 5 respectively to about 150 and 50. During the four days ending July 13th the total cases in the province had amounted to 420 and the deaths to 149. Of these attacks the largest number occurred in the town of Francavilla Fontana, where, during the same period, 233 cases and 99 deaths took place. Latiano also has suffered severely, 138 cases and 56 deaths having occurred there. Amongst other places attacked in the province are Brindisi itself, with 30 cases and 14 deaths, and Erchie, with 20 cases and 5 deaths. The most southern portion of the kingdom as yet infected would appear to be San Vito, where in three days 44 cases and 11 deaths took place. Somewhat higher up the coast than Brindisi, the disease is stated to have made great havoc at Mola di Bari, but no statistics are forthcoming as to this place. In the northern part of the kingdom Venice still suffers, although no material increase has as yet taken place there, the daily fatality being limited to one or two only. At Codigoro, in the immediately adjoining province, the fatality is increasing, and in the four days ending the 13th inst. 38 cases and 9 deaths were reported to have occurred. So, also, occasional cases have occurred at Trieste and at Fiume; but no extension into the interior of the Austro-Hungarian Empire has taken place. Returning again to Italy it is stated that isolated cases have been reported from the provinces of Bologna, Verona, Padua, Modena, and Vicenza. It is not easy to place a proper interpretation on such rumours, for whilst in an early stage

of an epidemic there is almost invariably a great tendency to hush up the first isolated attacks, there is after a time a similar tendency to regard every case of fatal diarrhœa as having been due to cholera. It is, however, satisfactory to know that amongst the Government officials who have visited the cholera-infected districts is Signor Morana, Secretary-General of the Department of the Interior, who has already acted as the Government historian of the epidemics of 1884 and 1885, and who has shown that his main desire is to place on record a faithful account of the occurrences of cholera in Italy, both as regards their statistics and as to the attempts that are made, whether by quarantine restrictions or otherwise, to stay the progress of the disease.

THE ETIOLOGY OF PNEUMONIA.

THE causation of pneumonia, notwithstanding its apparent simplicity in a great many cases, is in many more so obscure that every rational theory as to its origin must still possess a certain interest. It would be strange if sepsis, which is triumphant in various associated forms of illness, had no influence here, and we are accordingly prepared to find that it has. Even if those varieties of the disease which are connected with tubercle or with insidious catarrhal processes, and are not at first pneumonic, be excluded, the history of continued fever affords examples of germ development, which is first revealed in an inflamed lung, or is there engrafted during convalescence. In apparently simple cases due to chill, moreover, the share of malaria as a depressing precursor is not always easily defined. It must, however, be owned, after due allowance for every such morbid agent, that by far the commonest cause of acute lobar pneumonia is external cold. This theory, the truth of which is often self-evident, will best explain why strong and weak subjects alike are apt to be suddenly seized with inflammation of the lung, and why the prevalence of this disease bears a close relation to changes of the weather and is compatible with an atmosphere of great purity. Some who seem to favour an obscurer theory of chemical influence regard ozone as in some way directly responsible. Such, at least, would seem to be the implied meaning of statistics quoted by Dr. Draper, of New York, in which he couples an epidemic of pneumonia in that city with a high percentage of ozone in the air. We confess that we cannot trace any clear connexion between this supposed cause and the effect. If, however, we take the excess of ozone to indicate, as it well may, a fluctuating temperature with prevailing stormy winds, we have here conditions which will account for much inflammatory disease. This is probably the true version of the ozone theory. A theory which has been suggested,—not, we believe, by Dr. Draper, that ozone-pneumonias are due to ozone-fed germs, appears quite untenable in view of the fact that there is no better germicide than oxygen.

ELECTRIC CHARTS.

ELECTRICITY is of most use in diagnosis. To those who are in the habit of taking accurate electrical observations the possession of charts would prove of considerable value. Hitherto, in an ordinary way the number of facts to be recorded has been so limited that it has scarcely been worth while to employ electric charts. Nor is this state of things likely to change unless further important information of diagnostic or therapeutic value should be forthcoming; we cannot, therefore, predict for Dr. Leslie Phillips' neat, elaborate charts any very extensive employment. Though electric charts are not destined ever to become so generally useful as temperature charts, yet we cannot but think that any means which would facilitate the registration of observations are things to be desired.

ANATOMICAL AND MEDICAL KNOWLEDGE OF ANCIENT EGYPT.

THE surviving fragments of the early literature of Egypt are mainly of a religious character; but this is not to be wondered at, for the genius of the people was essentially religious, and their doctrine of the future state leavened their national life in almost every particular. To them the body was an integral part of the immortal humanity; therefore it could not be permitted to turn to decay, but had to be preserved from corruption that it might be a fit receptacle for the soul to dwell in through eternity. Their treatment of the body was thus dependent on their belief of its relation to the soul, and this, we learn from their religious writings, was a relationship of eternal independence. To secure perpetual preservation the body had to be properly embalmed, the cavities opened and subjected to the action of antiseptics. Although the body was sacred, under the special protection of the god Thoth, though each part was under the guardianship of a special divinity, yet this sacredness did not preclude careful inspection and the processes necessary for preservation, for all parts had to be perpetuated. Embalming was a religious rite, to be performed by the priests of the Cultus; and the historian Herodotus, has preserved for us what is doubtless a substantially accurate account of the different methods whereby it was done in the later times in which he lived. The organs removed from the bodies of persons of the better classes were not returned into the body, but were preserved in vases of alabaster or stone, surmounted by the heads of the four divinities of Hades, the sons of Horus and Isis. The vessel which contained the stomach and colon bore the human head of Amset; that which held the lungs and heart was under the protection of the jackal-head of Tuaut-mutef; that which contained the small intestine was beneath the baboon-head of Hapi; while the liver was guarded by the hawk-head of Kabhsenuf. During the ascendancy of Greek influence in Egypt, Alexandria earned the reputation of being the chief school of anatomy and medicine in the world. Erasistratus, who lived in the days of Ptolemy Soter, B.C. 285, was an anatomist of such enthusiasm, that he and his disciples receiving from the king criminals condemned to death, "Vivos inciderint considerarintque etiam, spiritu remanente, ea quæ natura ante clausisset, eorumque posituram, colorem, figuram, magnitudinem, ordinem, duritiem, mollitiem, lævorem, contactum, processus deinde singulorum et recessus et sive quid inseritur alteri sive quid partem alterius in se recipit." But this Alexandrian school, although upon Egyptian soil, was essentially Greek in spirit; even Herophilus had learned some of his anatomy from Praxagoras of Cos, although, as the anatomy of the earlier Greek school was originally derived from Egypt, it was but returning to the mother country the traditions of culture derived therefrom. It was in Egypt Democritus of Abdera studied, and so was fitted to teach anatomy to Hippocrates, the father of medicine. The three pithy and graphic letters on anatomy (which are extant), which it is supposed Democritus sent to Hippocrates may well have been the result of his Egyptian training. At a later period, it was at Alexandria that Galen pursued his study of anatomy under Heraclianus, and the anatomical school of Alexandria survived until the Mohammedan invasion of Amru in A.D. 640. That much even of the earlier Greek medicine, anatomy, and pathology was derived from Egypt we learn both directly and indirectly. Most of the vegetable drugs in use in Greece were natives of Egypt; and Galen, speaking of one prescription called Epigonos, tells us that it was obtained from the adytum of the temple of Ptah, at Memphis. He quotes it, and other Egyptian prescriptions from the book Narthex, written by Hera of Kappadokia. Medical colleges of far greater antiquity than that of Alexandria existed in the priestly

schools of Memphis, Heliopolis, Sais, and Thebes. These were much more faithful exponents of the purely Egyptian system of the art of physic. Of the ancient medical literature of Egypt, two nearly complete treatises are still extant, and six or seven fragments of others. These vary in date and in perfection. The most complete are the Papyrus Ebers and the Medical Papyrus of Berlin. The fragments which are noteworthy are:—The British Museum Papyrus, formerly the property of the Royal Institution, the Papyrus VI. of Boulaq, the Magical Papyri of Turin and Paris, the Coptic Medical Manuscript in the Borgia Library, and the Greek Papyri 383 and 384 of Leyden. In a paper read at a recent meeting of the Royal Institution of Great Britain on the Medical Knowledge of Ancient Egypt, of which the above is a summary, Professor Alexander Macalister, M.D., F.R.S., stated that he hoped soon to be in a position to publish a detailed and critical study of this medical literature, a work for which few are better qualified.

THE MEDICAL CARE OF BOYS AT PUBLIC SCHOOLS.

THE death of one of the scholars at Charterhouse School from the consequences of diphtheria at a time when his recovery was supposed to be assured is a fresh illustration of what for several years past we have endeavoured to point out. There are grave defects in the medical care of sick boys at our public schools. At Charterhouse, as at other schools, the most simple and ordinary rule for the protection of the healthy by isolation of the infectious sick appears to be set at nought. The Association of Medical Officers of Public Schools has framed a series of rules for the protection of schools from the introduction of infectious illness from without; but the same rules, when required to be brought into operation for the protection of the public—and the relatives of pupils in an infected school—seem to be to a great extent ignored. The head master at Charterhouse, whose son, it would appear, is the medical attendant at the school, states that "he does not care to answer the charges so far as regards his own conduct." We have before represented that whenever a death takes place at a public school there should be a full and impartial inquiry, not only into the cause of death, but into the methods adopted to guard against the fatal illness. Painful as it would be to the parents of the deceased scholar at Charterhouse School, it is to be hoped they will have sufficient courage and fortitude to call for an investigation by inquest into the cause of the death of their son at a time when "his recovery was supposed to be assured," as the head master asserts, and he was well enough to be among his schoolfellows again.

THE MICRO-ORGANISMS OF ACUTE SUPPURATION.

DR. D. O. KRANTSFELD, who has been engaged in the micro-biological study of acute suppuration in Professor Ivanovski's laboratory in St. Petersburg, states that it is always possible to detect micro-organisms in the pus of acute suppuration, both by means of cultures and by direct observation. Those most frequently met with are staphylococcus pyogenes (aureus, albus, and citreus) and streptococcus pyogenes. The presence and multiplication of micro-organisms in the tissues is, he thinks, the most important factor in the etiology of acute suppuration. They may, however, enter into the organism without setting up acute suppuration, the other conditions regulating this being their number and concentration, and the local and general state of the tissues. Staphylococcus and streptococcus are quite distinct from one another, both morphologically and biologically. In culture media staphylococcus develops quickly and equally well whether air is present or not, whereas streptococcus develops more slowly and is less vigorous; it also thrives better without free access of air, as in the deeper parts of the medium. In the tissues staphylococcus pyogenes develops rapidly, and may be carried along with the blood, while streptococcus pyogenes is more slow in its development, and especially affects the lymphatic vessels. In a large majority of cases of local acute suppuration the micro-organisms gain an entrance by means of external wounds, though sometimes they do not do so; abscesses due to staphylococcus pyogenes are generally situated near the locality in which the micro-organisms enter; those due to streptococcus pyogenes, on the contrary, are found at a distance from the place of injury, along the course of the lymphatic vessels, the lymphatic glands determining the localities of the suppuration. Both the micro-organisms may set up pyæmia and septicæmia, the foci in which staphylococcus is gathered being generally situated in internal organs, tending thus to give the affection more of a pyæmic character, while the collections of streptococci are mostly found about the joints and in serous cavities, thus causing symptoms more of a septicæmic character. At the period of life when the skeleton is growing, staphylococcus aureus has a tendency to find its way to the organisms of locomotion, especially to the bones. Pure cultures of staphylococcus pyogenes introduced into rabbits set up abscesses, pyæmia, septicæmia, and acute osteomyelitis. The suppuration occurring when antiseptic dressings are used must be classed etiologically with ordinary acute suppuration. These remarks apply to acute suppuration only, the examination of the pus from cold abscesses giving different results from that of the contents of acute abscesses.

SLEEP-WALKING.

AN inquest was held on July 9th, at Chester, on the body of a soldier who had died from injuries received by falling from a high window on to the ground. It appears that he got out of bed, opened the window of the room in which he was sleeping, and jumped out. He was accustomed to sleep in a room on the ground floor, and frequently left the room by the window instead of the door. There does not appear to have been any evidence brought forward that he had been known to do so at night, or that he was in any way accustomed to walk in his sleep. A verdict of "Accidental death" was returned. Sleep-walking or somnambulism is explained on the hypothesis that the sleep is partial in its area; portions of brain which are usually involved in the physiological condition peculiar to sleep remain exempt, so that the sleeper exhibits powers which sleep usually annuls. The individual appears to possess an unusual power of calling his muscles generally into activity in response to dream thoughts. Sight in relation to the dream may be good, muscular sense impressions also, but the sleep-walker may be deaf to all ordinary sounds. Hilton Fagge had the opinion "that true somnambulism (at least, when it is not a manifestation of hysteria) has every claim to be regarded as one of the members of the group of paroxysmal neuroses," in which group he includes migraine, epilepsy, paroxysmal vertigo, and paroxysmal insanity. In the attacks of somnambulism the sleeper will perform various acts—get up in the night, perhaps dress, go downstairs in the dark, move something from its place, or do something else quite trivial in character, return to his room, undress, and get into bed again; in the morning, however, there will be no recollection of the occurrence. At other times the walk may not be without danger, and cases are on record where the sleeper has met with a violent death from following the suggestion of his dream. This is of importance from a medico-legal point of view under a con-

tested policy of life insurance, in which it may have been provided that suicide would vitiate the policy. However, as suicide is held to include only intentional killing, could it be proved that the man was a somnambulist, the policy would hold good. The allied condition—that of somniloquy or sleep-talking—is extremely interesting, and there are wonderful accounts given of intellectual feats accomplished by people the subjects of it: abstruse mathematical problems solved, discoveries made, poems written, and long conversations carried on, there being complete forgetfulness on the part of the performer as to the occurrence of the act. In these cases there is not only a partial abeyance during sleep of some functions of the brain, but also an exaltation of others.

ELIMINATION OF MERCURY AFTER HYPODERMIC INJECTIONS AND INUNCTIONS.

THE system of treating syphilis by means of hypodermic injections having been of late largely employed both in this country and on the Continent, any information on the subject of the rate of diffusion and elimination of the mercury thus introduced is likely to prove valuable. An elaborate series of observations on the elimination of mercury by the urine after hypodermic mercurial treatment has just been published by Dr. Sukhoff, "ordinator" in the syphilitic clinic of Professor Tarnovski in St. Petersburg. The preparations used were a solution of corrosive sublimate, a similar solution with the addition of common salt, Bamberger's albuminate of mercury, the same author's peptonate of mercury, Max Bockhart's sterilised "blutserum-quecksilber," a solution of bicyanide of mercury, recommended first by Cullingworth (*vide* THE LANCET, May 23rd, 1874), a solution of the mercurial amide of formic acid, or Liebreich's hydrargyrum formamidatum, an emulsion of calomel, and, lastly, a solution of biniodide of mercury in iodide of potassium. The above solutions were mostly of the strength of 1 per cent., and the doses given usually corresponded to one-sixth of a grain of the salt used. Mercury was found in the urine about five hours after a single injection of any of the above, except the solution of the biniodide, which was not followed by any signs of mercury in the urine until after ten daily injections. During the course of treatment the amount of mercury in the urine gradually increased, but not at the same rate for all preparations. After the conclusion of the treatment the quantity eliminated continued for one or two weeks as great as it had been at the end of the treatment, and then declined, the fall being more gradual than the rise had been. There were no breaks in the elimination, and no difference was found in the quantities eliminated during different periods of the day. The organism gradually and spontaneously freed itself from all the mercury which had been introduced. Where mercurial stomatitis existed a much larger quantity of mercury was found in the urine than in other cases; the author therefore suggests that when stomatitis has been produced much smaller doses should subsequently be administered. The most active of all the preparations employed appeared to be the formamidate, for after a single injection the mercury was entirely eliminated in a couple of days.

Another series of observations on the urinary elimination of mercury has been made by Dr. Michaelovsky, also an "ordinator" of Professor Tarnovski's clinic. Here the form of treatment employed was that of inunction. The observations agree with those of Dr. Sukhoff in regard to the uniform and gradual method in which mercury passes from the system. Several different ointments were employed for the purpose of comparison. Mercury was detected in the urine about twelve hours after a single inunction of half a drachm of ung. hydrarg. cinereum duplicis, which contains fifteen grains of metallic mercury, no difference being observed when the ointment was prepared with cacao butter instead of suet, as is usual. A similar effect was produced in the same time by an inunction with half a drachm of Oberländer's mercurial soap, which also contains fifteen grains of mercury. An inunction of a drachm of the simple ung. hydrarg. cinereum, which contains twenty grains of mercury, was required to produce as rapid an effect on the urine as half a drachm of the two former preparations. Oleate of mercury was also tried in quantities of half a drachm, which contained fifteen grains of the yellow oxide. In this case three inunctions were required. The least active of all the ointments employed was the ung. hydrarg. sublimat. corros., which contains eight grains of the sublimate to the drachm. Here eight inunctions of half a drachm, or even a drachm, of the ointment were required before the urine answered to the test for mercury.

"IDIOTS" IN ASYLUMS.

WE warmly sympathise with the wish that idiots should not be exposed to the evils of contact with the insane. As Dr. Ireland eloquently contended in the address he delivered before a branch meeting of the Medico-Psychological Association at Carlisle in April last, "Imbeciles are generally weak, timid, and imitative. In a single night passed in an asylum for adults they learn practices which they never forget. They are often terrified by the wild words and antics of maniacal patients, catch up the oaths and curses which float about, learn their lowest habits, and imitate their wild movements. Naturally soft and credulous, they sometimes adopt the delusions which their insane companions take the trouble to teach them." All this is freely admitted. Nevertheless, it does not follow upon this recognition of a danger that the safeguard provided must needs be free from all peril of its own. We must confess to a fear that, inasmuch as the line of distinction between "idiocy"—or "imbecility," as it is now loosely called—and lunacy is not clearly drawn, it may happen that young persons who are, or are supposed to be, insane may be placed in asylums for idiots, instead of being subjected to the official scrutiny which, sooner or later, must be instituted as a protection to the insane before incarceration in an asylum for lunatics. It is doubtless most desirable that the greatest facilities should be offered for the separate training of idiots or imbeciles, but this ought not to be made an opportunity for the creation of a way by which weak-minded young persons can—we do not say will—be "put away" without the utmost precautions which the law can enforce for their protection. Dr. Ireland's address, which has just been published, is an excellent one, and we commend it to the attention of our readers as full of sound sense and trustworthy information.

THE BRITISH MEDICAL BENEVOLENT FUND.

SIR JAMES PAGET was in his right place presiding over the Jubilee Festival of this Fund. The eloquence, alike of his life and speech, was engaged in a thoroughly congruous duty in urging those who had been more fortunate in our "great unendowed profession to be mindful of those who had been less so. Sir James's chief theory of the want among members of the profession is that it may be entered without much capital. No one fact, of course, will explain why so many medical families come to need the help of such a fund. We may take another opportunity of discussing this. Meantime, let all who can help, do so. Great thanks are due to Dr. Broadbent for his hearty and valued labours as treasurer: £3500 is not a bad result of such good offices. The generous estimate of our profession by dignitories of the two great branches of the Catholic Church was very gratifying.

THE BACILLI OF TYPHOID FEVER.

DR. VILCHUR, who has been engaged in studying the bacteriology of typhoid fever in Prof. Afanasieff's laboratory, and who has published an interesting communication on the subject in the number of the *Vrach* just to hand, finds that typhoidc olonies are generally larger than similar colonies of a non-typhoid character; their colour, also, is a yellowish cinnamon, whereas in others there is no yellow tinge, and, moreover, they are cinnamon under circumstances in which non-typhoid colonies turn of a brown or even of a black colour. In doubtful cases consideration of the symptoms and of the microscopical preparations of the colonies will generally serve to distinguish those of a typhoid origin. Dr. Vilchur made more than two hundred cultivations from the organs of four typhoid patients, and examined the stools of twenty cases about the thirteenth day of the disease. He found that the bacilli multiply more luxuriantly in meat-peptone agar-agar than in meat-peptone jelly. Their breadth seems, too, to depend upon the cultivation medium, the broadest being developed on potatoes at 27° C., and the narrowest in meat-peptone agar-agar at the ordinary temperature of the room, the length ranging from the third of the diameter of a red blood-corpuscle to more than the full diameter. The longest specimens were developed in jelly cultures, and the shortest in agar-agar ones. Peculiar forms were met with after jelly cultures had stood for a considerable time; some bacilli being unequal in width, others having spores at the extremities and taking the stain very badly. Spores that could not be stained were obtained after a potato culture had remained in the thermal chamber at 37° C. for forty-eight hours, or for from fifty-eight to sixty hours at 27° C. When the potato remained for from seventy-two to eighty hours at 37° C. the spores regained the ability to take the stain, and indeed stained better than the bacilli themselves. An excellent stain for the purpose was found to be a solution of rubine in aniline water. In potato preparations kept for from forty-two to sixty hours bacilli were frequently met with presenting entirely unstained portions or vacuoli, the rest being well coloured. The author remarks that the micro-organisms which grow in colonies on plates do not correspond in number with those met with in stools, which implies that peptone jelly and agar-agar are not suitable media for the development of all micro-organisms. The stools of typhoid patients almost always contain typhoid bacilli in greater or less numbers and capable of being multiplied by cultivation. In the present series of researches they were found in sixteen cases out of twenty; in one case of typhus levis and in one of typhus afebrilis the existence of typhoid bacilli was demonstrated quite clearly.

SWIMMING A COMPULSORY STUDY.

THE sad recital of deaths from drowning which have occurred at various parts of our coast during this summer may well impress upon us the need, too little regarded, that every capable member of the community should learn to swim. We have already commented upon this subject, and have gone so far as to advocate the inclusion of swimming as an essential branch of education. Some, perhaps, may think that our view is an extreme one; they may tell us that fatalities from drowning do not, after all, greatly swell the registered death-rate, unless, indeed, we include those due to shipwreck, and that physical education may be regarded as an optional form of training, for which taxpayers would object to become responsible. From such a line of argument we feel obliged to differ. When we consider how great a portion of our population live at the coast, how many of these follow a seaman's calling, to what exigencies even the dwellers in inland districts may be exposed, and are often fatally exposed, by the chances of an occasional sea voyage, or by the customary visit to the seaside, it appears to us at least highly expedient that swimming should be included in the compulsory school course. It must be remembered that the time or trouble involved in teaching this art is as nothing in comparison with that required for intellectual study. The further steps of practice proceed without tuition. Admission to baths is not costly, the habit acquired is never lost, and the gain is invaluable.

MISTAKEN IDENTITY.

A CURIOUS case of mistaken identity, which recalls many others of like nature, was reported last week as having happened before a coroner's jury at St. Martin's Vestry Hall, Strand. The body of a man, aged about fifty, was found drowned near Charing-cross Bridge. A metal box was found in the pocket of deceased, which was identified by the clerks of Messrs. Carter and Co., seedsmen. But more curious still was the testimony of Thomas Kirby, in the employ of Messrs. Carter. This witness stated that he recognised the body as that of a fellow-clerk named Wilson, by the existence of "a peculiarity of two fingers of the right hand." Thus everything tended to warrant the jury in returning a verdict as to the death of the man Wilson, when the latter walked into court, bearing the marks on the fingers by which his identity had been mistaken. We are not informed whether the similarity of the deformity in the two persons was sufficiently marked as to deceive an experienced observer; but, at any rate, there can be little doubt that Wilson would have been "found drowned" though still living, had he not opportunely turned up. It would have been interesting to have watched the sequence of events which would have followed the finding in the coroner's court had Wilson failed to put in an appearance. The case illustrates the value of taking skilled medical evidence in all instances where death has arisen from other than natural causes, and of recording all physical peculiarities in a permanent way—e.g., by plaster-casting or photography. We doubt not that, had the facsimile of the marks on the body of the drowned man been kept for reference, it would have sufficed to show that the deformity differed in essential features from that of Wilson, even if this person had not been forthcoming to astonish the officials and audience of the coroner's court. It has been truly said that the mind is affected more by positive than by negative evidence, and for this reason it is advisable that every effort should be made to establish identity where there is more or less obvious similarity. The standard works on Medical Jurisprudence contain many cases of mistaken identity as regards both dead and living persons, but fortunately there are few where sooner or later the truth has not come to light. Nevertheless, it is of the highest importance that mistakes of the nature of the one under discussion should be detected and rectified before a miscarriage of justice has obtained, or possibly an irretrievable wrong has been inflicted.

THE RISE AND DEVELOPMENT OF NURSING.

UNDER the auspices of the National Health Society a series of lectures on the Art and Development of Nursing have been given by Miss Manson, matron of St. Bartholomew's Hospital, and were concluded on Wednesday last. The lectures have attracted considerable interest, the audiences being large and representative. Miss Manson takes a high view of the duties and responsibilities of a nurse, but insists upon the nurse being the assistant and servant of the doctor, whose eyes and ears she ought to be in the latter's absence. Tracing the history of medicine from the earliest times, she proved by quotations and references to authority that the Romans had hospital tents attached to their armies for the reception of the sick

and wounded. The graphic description of an ancient Mussulman hospital at Cairo, the completeness of which was remarkable; a reference to the misery of those who were consigned to the wards of the Hôtel Dieu at Paris a century ago, where the arrangements were so horrible as to cause the leaders of the Revolution to change the name of hospital to hospice; and an outline of the treatment of patients in St. Bartholomew's Hospital at the date of its foundation, were amongst the most interesting and effective points of the first address. Miss Manson also emphasised the fact of the womanliness of nursing as a profession in which the best and keenest sympathies of women are awakened towards the sick and suffering. The patience, charity, and compassion that are aroused in the true woman by a nurse's calling tend to develop the best and highest qualities of her nature. The presence of "tares" in the nursing field, as elsewhere, she said, was greatly to be regretted, but the tendency of modern systems of training was to eliminate all the unworthy at an early period of their hospital connexion, and so to increase the value of nursing by adding to the respect in which nurses as a whole were held by all who have to do with them. Miss Manson certainly did good service to the medical profession and to the cause of nursing by her fearless condemnation of practices which we have had to censure on more than one occasion.

MANURE IN KENSINGTON GARDENS.

THE daily press has rendered good service in denouncing the distribution of the mud taken from the Round Pond over the grass by the side of the flower-walk in the Kensington Gardens. On Wednesday we visited the Gardens, and found that the manure had been spread over an immense area of ground. It lay close to the roadway, both on the Kensington and Bayswater sides. The smell might well reach the houses if the wind blew in that direction. Though at that moment there was a strong gale and no sun shining, we nevertheless noticed an odour of musty decaying vegetable matter. This came from the black mud which had been extracted from the Round Pond, where it had accumulated to a depth of two feet. It is obvious that the Gardens at Kensington cannot be treated as a field in some uninhabited rural district. If the grass is in need of strengthening, this is assuredly the occasion for the application of uninjurious and non-odorous chemical manures. The petty economy implied by the use of the mud out of the pond is utterly unworthy of this great city and of a pleasure-ground surrounded by some of the wealthiest habitations in the world.

ELECTRIC BATHS IN EYE DISEASES.

PROFESSOR DENTI, writing in the *Annali di Ottalmologia*, states that he has found electric baths and douches very valuable in several ophthalmic affections, especially in those which refused to yield to more ordinary methods of treatment. His apparatus consists of a vessel of water placed at a height of two metres above the patient's head, a constant current battery of thirty cells, and a glass or ivory box without a bottom. This box is fitted on to the eye. It contains a metal pipe communicating by an indiarubber tube with the water vessel, from which the box can be filled with water; an efferent non-metallic pipe is also provided. The metal pipe is connected by wire with one pole of the battery, the other electrode being placed on the forehead or crown of the head. The sittings are of from four to six minutes' duration. For baths eight or ten cells are used, for douches twenty or more. No unpleasant effects have ever been observed, the stimulating action being only sufficient to produce a slight degree of hyperæmia. The author finds that the baths are best in deep-seated affections, such as those of the vitreous or of the optic nerve; the douches are useful in more superficial affections, such as those of the conjunctiva and cornea. Dr. Denti tried the electric baths in six cases: four of atrophy of the papilla in different stages, one of disseminated cloudiness of the vitreous, and one of double ulcerative blepharitis. The papillar atrophy was benefited most when it was slightest. In one case of atrophy accompanying disease of the spinal cord, the intra-ocular affection was, or appeared to be, arrested. The patient with the cloudy vitreous was so much improved that, though at first he could scarcely distinguish large objects, after thirty sittings he was able to read ordinary print. The patient with blepharitis was completely cured. The douches were employed six times: in three cases of paralysis of the eye muscles, and in three of exudations remaining after ulcerative keratitis. One of the cases of paralysis was entirely cured, the other two being improved; and in the cases of keratitis the success was most marked, the exudation being completely absorbed.

POST-GRADUATE COURSES IN GLASGOW.

IN a former issue we were able to announce that a series of lectures had been arranged to be held during the ensuing autumn. We are now in a position to give more detailed information to our readers. Professor Gairdner, Dr. Joseph Coats, and Dr. David Newman have arranged together to give a series of lectures and demonstrations, which will be held in the Western Infirmary, and which will be made as practical as possible, being illustrated by cases, museum specimens, and diagrams. The subjects to be taken up are as follows. Professor Gairdner will lecture on the Diseases of the Abdomen, which are somewhat loosely grouped by the Registrar-General under the designation Tabes Mesenterica. Dr. Coats will take up the subject of Phthisis Pulmonalis in certain of its aspects, with reference especially to its etiology and the coincident lesions in other organs. Dr. Newman will discuss some of the Affections of the Kidney for which Surgical Treatment may be required, with special reference to pathology and diagnosis. The first two lectures will be delivered at the Western Infirmary on Friday, Oct. 1st, at 1 P.M. and at 2.15 P.M. respectively. The course will be continued every Tuesday and Friday until Oct. 19th, there being two lectures delivered at each meeting. A syllabus of the course will be published, and may be had on application to Messrs. James MacLehose and Sons, St. Vincent-street, Glasgow, from whom also tickets for the joint course may be purchased, price one guinea and a half.

THE RULING HABIT.

IT has often been remarked that an actor is generally extremely different in character and mood off and on the stage respectively, and that his greatest successes are commonly the result of his greatest efforts. There have been many notable exceptions to this rule, but it is certain that an assumed character may so react on the brain and nervous system as to modify the natural type. Another point of interest is that in the case of performers who develop special facilities of action—for example, acrobats—habit, becoming "organised," is part of the nature, so that even in moods the least consonant with those to which the acts learned are professionally associated the ruling habit may be brought into play and determine conduct. It is not therefore certain that when an acrobat killed himself the other day in a lunatic asylum by throwing half-somersaults until he succeeded in striking his head so as to cause death, he deliberately chose that mode of suicide. It is quite as likely that in a paroxysm of madness the habit dominated. Lunatics are often remarkably insensible to pain.

CAVOUR AND BISMARCK ON STATE MEDICINE.

A LITTLE volume of some seven hundred pages, entitled "La Sapienza Politica del Cavour e del Bismarck," has just appeared under the competent editorship of Signor Filippo Mariotti, the well-known Italian publicist and man of letters. Though primarily designed for the student of politics, the book has a great deal to interest the professional man, and not least the votary of the healing art, dealing as it does with the relations of hygiene to the State, with the right of Government to interfere in professional education, in the food and water supply of the community and in the complex social questions which are brought home to the busy practitioner every day of his life. Signor Mariotti, remembering the saying of Bossuet, "C'est la maxime qui fait les grands hommes," has perused the many discourses of the great Italian and German statesmen with a vigilant eye to those passages in which years of special thought and experience are condensed and crystallised, so to speak, in pregnant apophthegms and memorable sayings; and the result is a volume of inductions and illustrations which cover the whole field of political and public life, and put the reader in possession of guiding principles which, in such crises as that we are now passing through, will be found as valuable as they are opportune. When the tumult and the din of an "appeal to the country" has subsided, and the approach of autumn brings the weary professional man the holiday he has earned, we can imagine few pleasanter or more profitable *compagnons de voyage* than this compact little treasury of the wisdom and the wit of the two great masters of statecraft and "unifiers of empire." Be it remembered that in continental parliaments the physician and the surgeon are far more numerously represented than in our own, and that many of the discussions, of which this volume gives us the etherialised essence, were provoked or shaped by the interpellations of medical deputies. A Virchow in the German Chamber, a Tommasi-Crudeli or a Moleschott in the Italian one, cannot fail to imprint their finely-trained intellects on the debates in which they take part, and it is one of the charms of Signor Mariotti's skilful compilation that not only does he make us hear Cavour and Bismarck at their best, but that he enables us to catch the echoes of far-reaching discussions to which the medical interlocutor has contributed the scientific thoroughness and the philosophic calm.

NOVEL MODES OF BURIAL.

THE literature of burial continues to increase as one or other modification of custom commends itself to some as more wholesome or convenient. The latest contribution we have seen is from the pen of Colonel T. Martin, formerly sanitary commissioner in Bombay and Scinde. This writer, while disposed in certain cases to advocate cremation of the dead, prefers for various reasons to maintain the practice of burial, subject to extensive changes in its principle and methods. He does not agree with ourselves in condemning without reserve many of the customs now in use. Far from advising an "earth-to-earth" system and the exclusive use of perishable coffins, he prefers a form of the latter which is air-tight and durable, though fitted with a valve intended to open underground. An elaborate system of subterranean ventilating tubes, with shafts attached which rise high above ground, is contrived to carry off putrid gases; and the design of the whole arrangement is to allow of spontaneous decomposition without direct contact of the body with the earth. The duration of such a process, we must conclude, is practically unlimited. For seaport towns, Colonel Martin has devised a similar method, inasmuch as the coffins are impervious, but with this difference, that burial takes place at sea. His objections to the earth-to-earth system are two. There is, first, he observes, the absorption of decaying matter by the soil and the chance of contamination of neighbouring springs by drainage from that soil; and, secondly, the greater risk from contagion where this exists if bodies are carried in lightly-made cases than if they are placed in close coffins. Now, neither of these objections is really valid. It is a standing rule of burial that cemeteries should never be laid out in the neighbourhood of a water-supply; while, on the other hand, filtration of putrid matter in a porous soil in which oxidative processes are rapidly going on is not to be dreaded as a source of contamination for wells at a distance. The infection, again, which hangs about a body after death may in any case be rendered innocuous while it is carried to its last resting-place by antiseptic materials, and these may even be of such a kind as to assist disintegration, if not putrefaction, after interment. With regard to sea-burial, there is always this objection, common to it and cremation, that the body so treated is not recoverable if required for judicial investigation. Taken altogether, the new system is, in our judgment, inferior, alike from its elaborate complexity and in respect of its sanitary promise, to the old, when that is rationally carried out and the mortal dust is freely surrendered to the earth itself.

THE HOSPITAL SATURDAY FUND.

THE thirteenth street collection in connexion with the Hospital Saturday Fund, of which Mr. Samuel Morley is the President, will take place to-day (the 17th inst.), when some 1800 persons will take charge of collecting-boxes. Of these 400 will be placed in the East and West Central districts, under the immediate control of the central office of the fund, and the remainder of London will be mapped out into twenty-four districts for the purposes of collection, each district having its own local committee. The efforts of the board of delegates—mainly working-men themselves—are chiefly directed to increasing the collections in the workshops of the metropolis; and this source of income, systematically conducted throughout the year, yields the larger result, although trade depression explains a considerable diminution in this branch of revenue.

OVERCROWDING AT BERLIN.

STATISTICS have been compiled which give anything but a favourable picture of life among the poor in Berlin. The capital of the German Empire contains about 40,000 houses, and of course a certain number of these are high-class mansions, where only one, or at most two, families reside. But, according to *Das Echo*, 2500 houses are divided into from sixteen to twenty apartments each; then there are 20,000 houses which have from twenty to thirty tenements each, and 1000 that are subdivided into more than thirty lodgings. Among these apartments or tenements there are 75,000 consisting of only one single room, which are inhabited by 270,000 persons; this gives an average of four inmates for each room. The apartments divided into two rooms also number about 75,000, and these are occupied by 360,000 persons. Finally, there are 30,000 apartments of three rooms, holding 140,000 persons. Such figures only feebly show the promiscuousness in which a large proportion of the Berlin population live, for they only give us averages, and individual cases are infinitely worse than the average. The houses in the poorer quarters are five and six storeys high, and built so close to each other that there is insufficient light and air. Filth and repulsive odours are the natural result. Many rooms are furnished with but one bed, which serves indiscriminately for the father, the mother, the children, and sometimes even for a lodger, who pays some trifle towards the rent. Naturally the education of the children is neglected, and Berlin is renowned for the extra-

ordinary number of juvenile criminals who prowl about its streets. From a sanitary point of view the death-rate of Berlin is one of the highest among the large towns of Europe: it is not difficult to trace the effect to its cause.

DUTIES AND DIFFICULTIES OF POOR-LAW MEDICAL OFFICERS.

OUR attention has been drawn to the report of a meeting of the Steyning Board of Guardians, at which an application was made by Mr. Medcalf for fees for attending two urgent cases (one undoubtedly a pauper case) *without* orders, which led to a long controversy amongst the guardians in reference to payment, ending in their agreeing to pay the fee in respect of the case of the pauper. We may take advantage of this case to make a few suggestions to Poor-law medical officers generally, when placed, as they often are, in similar circumstances. In cases of urgency happening to an undoubted pauper, time not allowing for the procuring of an order from the relieving officer, an overseers' order ought to be obtained; but in very extreme cases, as rupture of bloodvessels, fits, poisonings, drownings, &c., no Poor-law medical officer ought to hesitate to go even without an order. Also in reference to pauper midwifery, it is better for the medical officer to attend urgent cases without order than run the risk of being considered inhumane, as very few boards of guardians would refuse payment under such circumstances. There is no question but that Poor-law medical officers have many difficulties to contend with, from which they are not protected by the Local Government Board or guardians, entailing upon them extra work and anxiety, without adequate, often without any, pecuniary remuneration—a state of things, however, which happens, more or less, to all public men.

TENDON JERK AND MUSCLE JERK.

A PAPER was communicated by Drs. S. Weir Mitchell and Morris J. Lewis to the recent meeting of the Association of American Physicians upon Tendon Jerk and Muscle Jerk in Disease (*Boston Medical and Surgical Journal*, No. 25). They held that the knee phenomenon was a direct muscular response, and not due to reflex action; and showed that every muscular exertion, such as winking, if accurately timed, exaggerates these phenomena. To demonstrate this the patient should lie down with the knee slightly bent. At the time that the tendon is tapped, or just before, the patient is directed to wink, and it will be noticed that the jerk is much increased. This is more beautifully shown in the act of phonation, the patient being directed to count strongly, bringing the whole chest into play at the time the test is applied. A decided sensation, such as heat, cold, or an injury, will increase the responsive power of the muscle or tendon which has been struck. Both the tendon and the muscle jerk are reinforced by irritation of distant parts—a phenomenon which has been attributed to an increase of tone in the muscle. This reinforcement disappears when the muscles are cut off from the spinal centres. Observations upon twenty-three cases of locomotor ataxy were also presented in the paper, the cases being classified according to the degree of swaying movement when the patient is standing with the eyes shut. Four classes are thus distinguished: (1) those in which station was normal, (2) those in which it was slightly impaired, (3) those in which it was greatly impaired, and (4) paralytic cases. In the cases examined, the knee and ankle jerks, and their reinforcement, were absent at the time when the cases came under observation. The changes in the arm jerk seem to advance in the same way as those in the leg jerks, although they came on later. In the paralytic stage the muscle jerk is increased, although the reinforcement is absent. In the first stage of ataxy the tendon jerk is diminished or absent, while the reinforcement is fair; in the subsequent stages both the tendon jerk and its reinforcement are absent. The muscle jerk and its reinforcement continue normal through the first two stages; in the third stage, while the muscle jerk is normal, the reinforcement is absent. In the fourth stage the muscle jerk is increased, in the fifth it is diminished, and in the sixth it is absent as well as the reinforcement. The increase of the muscle jerk late in the disease may be due to some as yet undetermined irritative changes in the muscle. They noted also, in associated movements, that in some cases, if the patient is directed to shut his right hand, the left hand will also shut to a certain extent, and if he is sitting down the leg may be drawn up. This condition becomes more marked, with increase of the ataxy. Another symptom noted was a certain degree of prominence of the eyeballs.

THE SEWERAGE OF RICHMOND.

ANOTHER attempt is about to be made to deal with the vexed question of the sewerage of Richmond, which, in common with neighbouring places, is notorious for the multiplicity of schemes which have been advocated, and for the fact, notwithstanding them all, that it still allows sewage to pass into the Thames. A scheme has been contrived which will include Barnes, Mortlake, Kew, and Petersham. Another public inquiry by a Local Government Board inspector must be held with a view to raising the necessary loan of £96,000; and if we may judge by precedent, and by the amount of opposition which is threatened, leading engineers and authorities on the question of sewage disposal will be brought together by the various promoters and opponents, and another long inquiry will result. But whether the work is to be done by the authorities separately or collectively, we trust that steps will before long be taken to remove the sewage from this portion of the Thames.

REMNANT OF PUPILLARY MEMBRANE.

DR. VAN DUYSE, of Liége, has been able to examine microscopically an adult eye presenting a membrane passing in front of the pupil—being, in fact, the remnant of the pupillary membrane of the fœtus. It consisted of a quadrangular film, situated on the anterior surface of the lens, and bound by filaments to the inner circle of the iris. These filaments, under the microscope, appeared to have been capillaries from their endothelial nuclei, and they were composed of fibrillar connective tissue. The central film was composed of connective elements immersed in a transparent substratum; here and there epithelial cells were seen. In the centre of the membrane there was a pyramidal prominence consisting of connective tissue.

FOREIGN MEDICAL APPOINTMENTS.

DR. THEREMIN has been appointed Chief Medical Officer to the St. Petersburg Foundling Hospitals, in place of the late Dr. Frœbelius. Dr. Levashoff, of the Military Medical Academy, has been appointed Professor and Director of the Therapeutic Clinic attached to the University of Kazan. The ordinary Professorship of Psychiatry in the University of Kazan has been conferred on Dr. Bekhtereff. Dr. W. Roux has been appointed Extraordinary Professor of Anatomy in the University of Breslau. Prof. Grashey, of Würzburg, has accepted a "ruf" as Professor of Psychiatry in the University of Munich. We are glad to hear that Professor Bollinger, of Munich, is now sufficiently well to announce the resumption of his lectures. Dr. Carl Gussenbauer, Professor of Surgery, has been elected Rector of the German University of Prague.

INSANITARY STATE OF THE BLACK COUNTRY.

THE oft-proved causal relation between poverty and disease is just now strikingly exemplified in the so-called Black Country stretching between Birmingham and Wolverhampton—the centre of the South Staffordshire iron trade, which has long been in a state of great depression. Dr. Gresswell, an inspector of the Local Government Board, attended last Monday before the Tipton Board of Health to report grave defects in the local sewerage arrangements. There and at Dudley Port he found scores of houses without privy accommodation, the people compelled to rely for their water-supply on wells near ashpits. Scarlet fever and small-pox had prevailed, and the population generally bore traces of physical weakness and impaired health. The chairman of the Board thanked the inspector, and a very evident desire was manifest to do all that was possible to meet the evil; but, to quote the official statement, "Tipton is in a great state of poverty; people do not pay rent; and landlords and landladies, no richer than the tenants, cannot put property in repair, or reimburse the Board if they make the outlay." In the neighbouring town of Wednesbury also there is much poverty, and here a serious epidemic of measles has prevailed for some time, and as yet shows no signs of abatement. The first death from that disease occurred in the week ending April 30th. Towards the latter end of May a marked increase was noticeable, and twenty-nine deaths from measles have occurred in Wednesbury between June 4th and July 9th. By far the largest number of cases arose in the poorer parts of the town, in which likewise the fatality is greatest, chiefly as the result of want of treatment in the early stages. Of the twenty-nine deaths above referred to, no fewer than twelve were complicated with pneumonia, four with capillary bronchitis, and one with convulsions. Dr. Arthur Underhill and Mr. Walter Garman, respectively medical officers of health at Tipton and Wednesbury, are doing the utmost, in conjunction with the local authoritities, to remedy the evil. The state of things calls for sympathy more than blame. A revival of the iron trade would soon put matters right; for to crowds of men in times of peace, as to armies in war, nothing is more fatal than want of the necessaries of life and the undermining influence of moral depression.

DEATH IN AN ASYLUM: HOW?

A CASE of sudden death, either accidental or resulting from injuries inflicted by some person or persons other than the deceased, has just occurred at the Surrey County Lunatic Asylum, Wandsworth Common. Dr. Biggs, the medical superintendent, pronounced the evidence of certain lunatics who alleged that they had witnessed an assault by attendants trustworthy so far as their mental condition was concerned. The coroner's jury seem to have doubted this affirmation, and to have given the attendants the full benefit of the doubt. The case is obviously one which calls for a more searching inquiry, and we venture to hope the Home Secretary will order a further investigation. The matter ought not to be left where it is.

LEICESTER AND VACCINATION.

WE have lately shown how the boasted immunity of Leicester from small-pox depends on the revaccination of its official sanitary staff. This does not protect the unvaccinated, who in various ways of life are pretty sure to be caught by the loathsome disease. The number of unprotected, ripening for a harvest of disease, blindness, and death, goes on increasing under the lead of the blind guides of the town. Out of 2500 children born in the last six months, only 300 have been vaccinated. Prosecutions for non-vaccination are suspended, and the people are acting accordingly.

LARGE BILIARY CALCULUS.

AT the recent meeting of the Paris Société de Thérapeutique, Dr. Bouloumié exhibited a biliary calculus weighing 20 grammes = 5·144 drachms. It was of cylindroid shape, and measured 2 inches in length, 3¼ inches in circumference, and on section 2 inches in the long axis of the exposed surface. The calculus consisted almost entirely of cholesterine, with layers of biliary colouring matter, and a small quantity of salts of lime. The patient, a female aged fifty, had had several attacks of hepatic colic, but made a good recovery.

THE HOSPITAL SUNDAY FUND.

THE sum received at the Mansion House up to Thursday evening last reached £35,000. This amount is £5500 in excess of that paid in at the corresponding period last year. Many contributions have yet to come in, which, we trust, will bring up the fund to a total somewhat commensurate with the size and wealth of the largest and richest city in the world.

TUBERCLE OF THYMUS.

A VERY small child, the issue of healthy parents, died from marasmus forty-two days after birth. At the necropsy, three tubercles each the size of a pea, and a fourth one the size of a nut, were discovered in the thymus gland. Microscopical examination detected the presence of the characteristic bacilli, though not in great numbers. There were no tubercles in any other organs. The child had been fed with boiled cow's milk. Demme, who records the case in the *Fortschritte der Medicin*, No. 9, regards it as one of congenital tuberculosis.

SMALL-POX AT MARSEILLES.

Le Journal de Médecine et de Chirurgie for June reports that the epidemic of small-pox which has prevailed in Marseilles during the last nine months continues to increase in severity, and yet the people seem very averse to vaccination. The disease proved fatal to 953 persons in the first three months of this year, but only 325 were vaccinated in the dispensaries specially established for that purpose in different parts of the city. With such a state of things in the principal Mediterranean seaport, and with cholera on the shores of the Adriatic, our countrymen may well be circumspect in going far south for their summer holidays.

CATHETERISM OF THE URETER.

DR. LÉO WARNOTS, surgeon to the Hospital of Saint Jean, has been awarded the degree of Doctor of Medicine with *la plus grande distinction* by the University of Brussels, for his thesis on "Catheterism of the Ureters in the Female." The author discussed the methods of G. Simon and of Pawlik, collecting a large number of facts in support of his views, and thus contributing to show that this operation may in some cases be of great value where operative interference with the kidneys of a female patient are contemplated.

THE PASTEUR INOCULATIONS.

IN Vienna Dr. Ullmann, assistant to Prof. Albert, has inoculated thirteen persons who had been bitten by animals thought to be rabid. Dr. Barattieri is establishing a Pasteur Institute in Milan. Both Dr. Ullmann and Dr. Barattieri have studied the subject in Paris with M. Pasteur himself.

DR. SEMMOLA, Professor of Therapeutics in the University of Naples, has been raised by Royal Warrant to the dignity of a Senator of the Kingdom of Italy.

THE Madrid Jennerian Society, which has for some years past been the centre for discussions on questions connected with vaccination arising in the Spanish capital, has ceased to exist—at least as a separate society,—various causes having combined to render its fusion into a more comprehensive scientific body desirable. The Medico-Chirurgical Academy has, after some time spent in negotiations, consented to absorb it, and to constitute a Vaccinological Section. The presidency of the new section has just been conferred, after election, on Señor Serret, editor of *El Genio Medico-Quirurgico*.

THE Administrative Committee of the Cantonal Hospital of Geneva has introduced an innovation in the mode of election of members to its medical staff. The committee determined that a competitive examination should decide which of the candidates were to be appointed. Under this new system M. Goetz was appointed physician, and M. Comte surgeon to the hospital; M. Cordes to be surgeon to the maternity.

MUCH sickness having prevailed amongst the troops occupying the new barracks at Gosport, owing, it is believed, to the foul condition of the old moats hard by, the War Office has ordered the barracks to be closed for two months, the men being directed to remove to the forts outside the town.

SIR W. MAC CORMAC'S "Notes of an Ambulance Surgeon" have recently been translated into Japanese, and the original illustrations have all been faithfully and cleverly reproduced both in the form of lithography and woodcuts. The name of the translator is Brigade-Surgeon Yakoi, of the Imperial Army Hospital, Yeddo.

M. PONCET stated at a recent meeting of the Paris Biological Society that he had always found microbes in chalazæ, which could be cultivated, the culture applied to the conjunctiva of a rabbit setting up a violent inflammation and quickly producing hypopion.

REPORT
OF THE
Lancet Commission
ON THE
POLLUTION OF THE THAMES AT THE HENLEY REGATTA.

THE growing popularity of regattas on the Upper Thames is giving rise to a new sanitary danger which must not be overlooked. Local authorities have not yet fully realised that when an exceptional number of persons congregate together special precautions must be taken. We are always ready to denounce the pilgrimages practised by Eastern populations; but at home our boat-races and our horse-races are so many small Meccas, that endanger alike the health of the visitors and the surrounding inhabitants. By fasting and fatigue the Mahomedan pilgrim increases the risks of his journey. By feasting and over-exertion the English pleasure-seekers and athletes also favour the outbreak of disease. It will be urged that in England the crowd, though immense, is so quickly gathered together, and then so promptly dispersed, that there is no time for any serious evil to arise. Also, if the towns or villages near a great racecourse are overcrowded for a day or two, these localities may profess to be properly administered by competent sanitary authorities and drained in the best way possible. There is, nevertheless, many reasons to doubt the efficiency of sanitary arrangements in towns renowned for their sporting associations. In any case, if the houses on land are under some sort of control, it is only too evident that the increasing number of habitations which float about on the water altogether escape any such supervision.

Formerly a regatta brought a few thousand people to the river-side for the brief space of an afternoon, and naturally no serious consequences were anticipated. But now the Henley Regatta is no longer limited to an afternoon, but it is prolonged for three whole days. People do not merely crowd on the river-bank for a few hours, they come and live on the water for the better part of a week. Not content with filling every house on shore with lodgers and visitors, houses are now built on old barges, and these, tugged up the river, anchored close to each other, have converted the pure stream into a dirty street. One or two house-boats might be allowed, but last week along the length of the course, for a distance of about a mile, these houses, closely packed, were stationed for several days. Here and there we have a steam launch, a large boat, or some other sort of craft; but these vessels, whatever their shape or name, are inhabited, and therefore contribute to the pollution of the river. Most of the house-boats and many of the other craft have closets on board, which drain directly into the water. The law forbids direct drainage into the Thames, but these house-boats openly disregard this law. The various towns and villages situated beyond the intake of Thames water for the drinking-supply of London are put to the greatest trouble and expense in order to dispose of their sewage without polluting the river. The many schemes for dealing with the drainage of the Thames valley, so as to prevent the contamination of the river on which London depends for its supply of potable water, have been discussed over and over again in these columns. Yet while so much trouble is taken, so many financial sacrifices imposed, to settle this difficult and complicated question, an increasing number of mere pleasure-seekers are allowed to set these sanitary precautions at defiance, just at the season of the year when their strict observance is most necessary.

The origin and development of the cholera germ are not yet known. It would be impossible to say what amount of germs is necessary to pollute a river, or how far these organisms would travel down a stream without losing their vitality. But that cholera follows the watercourses was fully demonstrated by the recent epidemic in Spain. Now the cholera has broken out again in Italy, and, of all places, in one which most affects the interests of England. At Brindisi, where travellers to India by the overland route embark and disembark, the cholera is now prevailing. Further, it is evident that a large proportion of persons coming from India belong precisely to the very class most likely to attend festivities such as the Henley Regatta. These persons, by stopping a few hours or days at Brindisi, might bring over with them the germs of cholera—just as, last year, sailors from Barcelona and other ports of Spain brought cholera over to English towns. At Bristol, notably, where a sailor died of Spanish cholera, it was possible to disinfect the drains of his house and prevent the disease travelling further. But if, at the Henley Regatta, anyone living on a house-boat had been seized with cholera, the specific germs would, in all probability, have been discharged into the Thames. What mischief would have ensued we are unable to surmise. It is to be hoped that the dejections of more than one cholera patient are necessary to contaminate a river; but we have no certainty of this immunity. Also, if the germs did not travel down as far as the water intake at Teddington, it must not be forgotten that the water of the Thames is employed on the spot. If most persons have the prudence to avoid drinking this water, their servants do not scruple to use it for washing plates, &c. Hence the presence of cholera on one house-boat might well communicate the disease to other similar crafts floating close by, but lower down the river.

On land at Henley it will be found that the inhabitants drain into cesspools. They suffer, therefore, from all the inconveniences of this system. The wells, as usual, are placed too near to the cesspools, and are consequently often contaminated. Sore-throat, scarlet fever, and diphtheria, are too well known at Henley. Yet these risks, this danger and suffering, are endured because the inhabitants of Henley feel that it is their duty not to drain into the Thames. If a humble cottager living on the banks of the river sought to protect the lives of his children by removing his

cesspool and substituting a small pipe to drain direct into the Thames, he would be prosecuted. But numerous and fashionable people, who in the superfluity of their wealth can purchase or build house-boats, are allowed to have closets on board that empty into the water which we in London are compelled to drink.

This is not the only grievance. The services of dustmen and scavengers are alike judged superfluous. All the refuse—the offal, garbage, and rubbish resulting from so many picnics and so much feasting—is thrown overboard. The appearance of the river was simply scandalous. Out in the middle of the stream we saw floating slowly away every sort of refuse; a portion of course got entangled between the shore and the boats and there formed unpleasant accumulations. Opposite the "red cottages" on Saturday, the day following the last race, we visited a house-boat and examined the nature of the waste materials floating between this dwelling and the shore. There was a great number of decomposing salad leaves, some rotten fruit, innumerable egg-shells with part of the yellow of the eggs still adhering, several large pieces of bread, the skin of a salmon, a skirt of lamb, stale pieces of fat and meat, some spring onions, innumerable crushed lemons, faded flowers, lobster-shells, bruised tomatoes, and a dead roach. A bucketful of water taken from the midst of this garbage smelt very unpleasant. On applying Nessler's test it gave a deep reaction, pointing to the presence of organic contamination. A few yards lower down the river we met with another dead fish. Perhaps the pollution had proved fatal to these fish. The various creeks down the river, where the action of the current is feeble, were very foul indeed, and we heard many complaints concerning the abominable odours that arise in such places.

Close to the starting-point of the race-course there is a small creek where the water seemed exceptionally foul. Special complaints had been made of the bad odours arising at this particular spot. The water had a curious musty vegetable smell. Without attempting any quantitative analysis, by merely applying Nessler's test the colouration obtained was so intense that it was evident the amount of ammonia must have exceeded a grain per gallon. Indeed, by boiling some of the water with caustic potash, the smell of liberated ammonia was quite distinct. Thus, where the water is comparatively stagnant the amount of organic decomposition noted is enough to account for the most dangerous condition of the surrounding atmosphere; while, even in the open stream, the presence of ammonia can be clearly traced in the water collected round about the house-boats and amidst the garbage which is thrown from these vessels into the river.

That dangers must spring from such a state of affairs is obvious to all, and it is not necessary to point out any individual instance of harm done. But such cases have come under our notice. We have seen and questioned local and other practitioners who have attended cases of malignant sore-throat following closely on exposure to the effluvium which has disturbed garden parties held on the river-bank at the time of the Regatta. It has further been maintained, in our presence, that sore-throats and diarrhœa have affected the rowers who have been exposed to the corruption surrounding the house-boats. At the same time the population on the river is exceptionally healthy. Invalids and delicate persons do not usually participate in regattas, and plenty of out-door exercise will enable the human frame to resist many injurious influences. But this comparative immunity does not justify the contamination of the river.

The Thames, however, might easily be saved from pollution by a few very simple measures. It would, firstly, be necessary to enact a law or bye-law abolishing all closets on board house-boats and other inhabited vessels. It should be the practice to land for sanitary purposes. Secondly, it is absolutely indispensable that the sanitary authorities, on both banks, should come to a mutual agreement for the fitting out of a scavenger boat. This boat would come in the morning and take away from all the floating habitations the dust, the night stools, the refuse and garbage collected during the previous twenty-four hours. When this facility has been provided, then anyone throwing rubbish into the Thames should be prosecuted. A few detectives could watch, and, by making an example of the first cases, the practice would soon be stopped. Neither of these measures would entail any great outlay, and even those most concerned would willingly submit to regulations obviously made in their own interest as well as in the interests of the community at large.

THRUST WOUNDS THROUGH THE ORBIT.

THE roof, and more especially the inner wall of the orbit, is so thin and fragile that a comparatively slight thrust with a pointed or a blunt instrument, like the end of an umbrella or of a walking-stick, may be sufficient to penetrate into the closely contiguous brain substance. Such a case was placed on record in THE LANCET of June 19th by Dr. Campbell Pope and Mr. Rickman Godlee. Aphasia ensued, but under judicious management the patient made an excellent recovery; and the opportunity is a favourable one for reviewing a class of comparatively rare injuries possessing exceptional anatomical and clinical interest.

We have the authority of Sir Prescott Hewett and Mr. Whitaker Hulke for the statement that "in no class of cases is the surgeon more likely to be put off his guard as to the exact nature and extent of the injury. At first, all that may be apparent is the slight injury of the external parts—a trifling wound of the upper lid, and sometimes not even that, for the instrument may have slipped under the lid and left merely a patch of ecchymosis on the conjunctiva. Brain symptoms there may be none. Two or three days may pass over, during which the patient goes about as usual; then brain symptoms make their appearance, sometimes suddenly, and the patient dies in the course of a few hours or days, and the true nature of the case is revealed only by the post-mortem examination."[1] Exactly concordant is the most recent authority, Mr. George Lawson, in Christopher Heath's "Dictionary of Practical Surgery": "One curious fact connected with these punctured fractures of the orbit is that the severe nature of the injury is often overlooked; the external wound may be small, the immediate symptoms may be trifling, and the exact injury is not even surmised." The patient may be able to continue work for some time, then become delirious, comatose, and die, or recover under the most extraordinary circumstances. In THE LANCET, 1837-8, vol. ii., p. 16, Mr. Congreve Selwyn, consulting physician to the Ledbury Dispensary, recorded the case of W. B——, aged four, who fell on the floor whilst eating his dinner. The knife—a common cheese-knife, about 4¼ in. long in the blade, and averaging three-quarters of an inch broad—entered the right orbit nearly horizontally to the depth of three inches and a quarter, immediately beneath the superciliary ridge, and penetrating (through the posterior part of the orbital plate of the frontal bone) the substance of the brain, injuring in its course the optic nerve. It required all the father's force to dislodge the knife from its situation. Hæmorrhage was very slight. Some portion of the brain protruded after removal of the knife, and more was discharged on the eighth day after the injury. Some sleeplessness and delirium followed, but under low diet, little or no medical treatment, and the application of strips of adhesive plaster to the wound, healing was complete in six weeks, and the patient was alive and well seventeen years after.

In illustration of the little importance sometimes attached to these orbital thrust wounds at the time of infliction and of their terrible import, no more striking case can be adduced than one here abridged from a letter of Sir Philip Crampton: "In the winter of 1814, a lieutenant in a Highland regiment, when running on a dark night to escape from a shower of rain, came rather violently in contact with an irritable old man, who made a thrust at him with an umbrella, the point of which struck him immediately beneath the left eyebrow. The wound was attended with so little local pain or shock to the system, that the patient walked to my house in Dawson-street (a distance of at least half a mile), and having mentioned the occurrence as one to which, however, he attached no importance, he begged of me to look at the wound in the eyelid, which still continued to bleed slightly. I found a wound of about three-fourths of an inch in length in the upper eyelid, exactly in the seat of the deep fold which is formed in this part by the action of opening the eye and looking upwards. When the eyeball was turned up, there was no appearance of wound, but when the eyelid was drawn downwards the wound gaped, and showed the conjunctiva, which still completely covered the upper portion of the ball of the eye. The vision was quite unimpaired. The wound having been united by two points of

[1] See Holmes' System of Surgery, third edition, vol. i., p. 585-6.

suture, the patient walked to his lodgings in Grafton-street. I called on him the next morning, and found him at breakfast; he made no complaint but of some stiffness in the eyelid. The following morning, at 7 A.M., I was called to him in a hurry, and found him in very strong convulsions, which continued with short intervals of coma until 8 or 9 o'clock in the evening, when he expired. At the post-mortem examination the brass ferrule of the umbrella, nearly two inches in length, was found to have penetrated through the orbital plate of the frontal bone, and was lodged in the substance of the left hemisphere of the brain; it was embedded in a thin coagulum of blood, which extended into the left lateral ventricle."[2]

An equally formidable injury, though happily unattended with loss of life, was published in THE LANCET for 1862 (vol. i., p. 626) by Mr. W. R. Beaumont, formerly professor of surgery in the University of Toronto. A man while looking on at a rocket being fired felt a terrific blow on the left eye. He walked some thirty yards to a tavern, where he was seen in about ten minutes by Mr. Beaumont. He was sitting in a chair, with pale face and lips and extremely small weak pulse. No expression of pain; no symptom of cerebral lesion. Vision of the eye on the injured side was immediately and completely lost, but the eye itself appeared uninjured. The only mark of injury visible was a thin splinter of wood, not half an inch long, projecting from the orbit immediately above the inner canthus. Mr. Beaumont adds: "I placed the man on the floor, half recumbent, his head and shoulders being supported. I then endeavoured to extract with tolerably strong forceps what I supposed to be a small portion of a rocket shaft, but I found that I could not stir it. I sent for and soon obtained a pair of strong, flat-bladed pliers, with which even I could not move by direct traction the extruded shaft, so tightly was it wedged between the bones through which it had passed. Knowing that the shaft of a rocket is not round like that of an arrow, but square, I was aware of the small extent to which it could be rotated on its axis; still I found on trying to do so that a slight degree of movement on its axis was not impossible, and by turning it several times a few degrees alternately to the right and to the left I at last loosened it, and slowly drew out five inches and a half of the rocket shaft, the transverse section of which proved to be four-tenths of an inch square." A profuse gush of blood followed, but ceased in a few minutes after the application of iced water. The patient did not even faint, and in less than fifteen minutes, without any help, got up from the floor and walked. He suffered severe headache and vomiting during the first twenty-four hours, but not much pain after that. In three days he was dressed and walking about his room. The wound healed very readily, with scarcely any suppuration; no piece of bone came away. There was no paralysis except loss of vision of the left eye and loss of sensation in parts of the infra-orbital nerve. The only treatment adopted was cold water to the head and a few doses of calomel and jalap. Forty days after the accident the man was in good health and perfectly well, excepting left blindness. He continued so when again seen after a lapse of three years, but he complained of his memory being decidedly impaired. As to the exact course which the rocket shaft had taken, Mr. Beaumont adds, "It seemed, as I withdrew it, to have passed almost directly backwards, nearly parallel with the mesian line, apparently through the sphenoidal fissure, and into the base of the middle and posterior lobes of the left hemisphere of the brain; but as it had not killed him, nor even caused any symptoms of cerebral lesion, one can scarcely think that it had taken this direction, especially as all the nerves passing through this aperture had escaped uninjured. . . . . I am sure from the direction of the shaft, as I slowly extracted it, that it had not passed obliquely downwards into the pharynx, and therefore that it must have taken a course either immediately above or below the base of the skull. Under either condition the patient's escape from death renders the case one of the most remarkable in the annals of surgery."

For notes of the following hitherto unpublished case we are indebted to Mr. A. F. Hawkins, obstetric surgeon to the Queen's Hospital, Birmingham. A female pupil (aged three) at a neighbouring Board school fell on the floor while in the act of knitting, and broke one of the needles. Two pieces were found, measuring respectively three-quarters of an inch and four inches and three-quarters, but on joining them and comparing them with the other needle it was evident that a considerable piece was missing. The child seemed dazed for a moment, but then went on with her lessons, the schoolmistress noticing at the time a spot of blood above the eyelid and just under the eyebrow on the right side. The next day the child again attended school, apparently all right, but when she presented herself the following day she did not seem quite so well, and it was deemed prudent to take her to the Queen's Hospital Casualty Department, at the time in charge of Mr. Hawkins. He noticed a small scab where the blood-drop had appeared at the time of the fall, but as the child presented no special symptoms, he advised that she should be taken home and carefully watched, diligent search to be again made for the missing piece of needle, and the child to be brought to the hospital at once if in any way complaining. Next day (fourth from the accident) the child was brought to the hospital with paralysis of the left side, more marked in the upper than in the lower extremity. Mr. Hawkins at once summoned a consultation, which was attended by Mr. Bennett May and Mr. Priestley Smith. The child was placed under chloroform, and an incision made through the eyelid and subjacent tissues in the situation of the original blood spot. At a depth of about three-quarters of an inch the probe came in contact with a hard substance, which was seized with a fine pair of forceps and drawn out, proving to be the missing piece of knitting-needle, of which the annexed woodcut is an exact representation. As the child was lying flat on the table during the operation, it was specially noted that in drawing out the needle it was almost perpendicular to the eye; if the deeper end deviated at all, it was slightly upwards. The symptoms of paralysis continued for ten days, when they began to subside. They then did so rapidly, and the child was well within another week. She continued so when seen a year afterwards.

The concurrent practical teaching of these cases is that great importance must be attached to all wounds, however small and apparently insignificant, in the neighbourhood of the eye as well as in the globe itself, especially if there be the slightest reason to suspect penetration and lodgment of a foreign body. In consequence of the looseness of the soft tissues, and of the bony spaces in the neighbourhood of the eye, it is not difficult to understand that foreign bodies may be driven into, and ensconced in, comparatively safe quarters, though apparently driven into the brain. But in some cases the symptoms, in others the necropsy, place beyond doubt brain penetration in some thrust wounds through the orbit. Immediate extraction is obviously indicated when any portion of the offending agent can be seen or felt, and the last-mentioned case in the series justifies the prudence of cutting down to search for the foreign body, when its presence is strongly indicated by the facts and history of the accident, and by the evolution of nervous phenomena.

GEOGRAPHICAL DISTRIBUTION OF FATAL CANCER DISEASE.

THE recently issued annual report of the Registrar-General for the year 1884 contains some valuable statistics bearing upon the marked increase of the recorded death-rate from cancer during the past thirty-five years, and upon the geographical distribution of this disease. The increase of the mortality from cancer in England and Wales in the ten years 1871-80, compared with the ten years 1851-60, was equal to 62 per cent. among males, and to 43 per cent. among females. It also appears that the increase between these periods, both among males and females, was greater at each successive age period after thirty-five years. The report points out that "the very unequal increase in the male and female cancer mortality seems difficult of explanation on the hypothesis that the general increase has been altogether real, and not in great part only apparent." It is suggested that

[2] The Dublin Quarterly Journal of Medical Science, vol. xi., 1851, p. 352.

the more probable explanation of this inequality is the fact that "the cancerous affections of males are in a much larger proportion internal or inaccessible than are those of females, and consequently are more difficult of recognition, so that any improvement in medical diagnosis would add more to the male than to the female figures." This argument gives reasonable probability to the supposition that a very considerable, though unknown, proportion of the increase of recorded cancer mortality is really the result of improved diagnosis. With regard to the geographical distribution of fatal cancer, the report gives a table showing the mean annual death-rate from this disease in each of the registration counties in England per 1,000,000 persons, male and female, living during the ten years 1871-80; these rates have been laboriously corrected for variations of age and sex distribution in the county populations, and are therefore strictly comparable. The most noticeable feature of this table is the marked excess of cancer mortality in London; this apparent excess would, however, certainly be lessened, and might disappear, if it were possible to eliminate all those fatal cases imported into London for hospital treatment or operation. A somewhat similar explanation is suggested for the excessive mortality in Devonshire, on the ground that the coast of that county includes so many health-resorts of sick persons. It is pointed out, however, that the corrected cancer death-rates in many of the counties around London also show a considerable excess, indicating that this part of England, especially the Thames valley, is favourable to the development of cancer. It has long and generally been asserted that cancer is specially prevalent in fen districts and in low-lying ground, and the accuracy of this widely accepted opinion is corroborated by these new statistics. The counties of Cambridge, Northampton, Huntingdon, and Bedford all show cancer death-rates considerably above the average; at the same time, however, it appears that in Essex and in Lincolnshire the rate from this disease was below the general English average. It is pointed out that in most of the mining and industrial counties, the cancer death-rate is below the mean rate in agricultural counties; and, further, that almost all the highest county rates occur in the eastern, and most of the lowest in the western, half of the kingdom. There are, however, enough exceptions to these generalisations to forbid their unreserved acceptation. Judged, however, by the recorded facts of the thirty years 1851-80, the highest mortality from this disease is shown in London and the three registration divisions adjoining London; while the divisions with the lowest mortality are the north-western, the north-midland, and the Welsh. In dealing with the figures, and drawing conclusions therefrom as to the geographical distribution of fatal cancer, it should constantly be borne in mind that the value of the recorded facts depends entirely upon the accuracy of the medical diagnosis and certification of the cause of death, as entered in the death register. It may safely be assumed that there is an intimate relation between general accuracy of diagnosis and the proportion of duly certified deaths. In connexion with this, it may be pointed out that the recent proportion of uncertified deaths was only 1·3 per cent. in London, whereas it ranged upwards in the other divisions to 8·5 in the Welsh division. It is possible, therefore, that the recorded excess of cancer mortality in London may be partly due to more accurate diagnosis and certification, and the low mortality in Wales to more or less defective diagnosis and certification.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On Diphtheria in certain districts in Hertfordshire, by Mr. SWEETING.—This is the last of a series of reports which Mr. Sweeting prepared for the Local Government Board, and it involved investigation into the circumstances of the prevalence of diphtheria in the Hitchin, Bishop's Stortford, and Hemel-Hempstead rural districts, and in the Watford urban district. In the *Hitchin Rural District* the diphtheria mainly affected the village of Whitwell, with its 750 inhabitants. In the epidemic under notice some 53 undoubted attacks of diphtheria came under observation, of which 19 were fatal. The disease was first recognised in August, 1884, but some minor throat ailments had existed before that date, and some fatal attacks of so-called croup had previously occurred in the neighbourhood. But, whatever its origin, the disease lingered in Whitwell up to the end of 1885, when persons were still suffering from the complaint. Milk was excluded as a cause, whereas personal communication between sick and healthy must be regarded as having largely contributed to its spread. Beyond school closure and a little fumigation no action was taken on the part of the authorities to check its prevalence, and no attempt was made by the hire of a cottage or otherwise to provide any means for the isolation of the sick. In the *Bishop's Stortford Rural District* recent diphtheria has been confined to the villages of Braughing and Little Hallingbury. During a first outbreak at Braughing, beginning in December, 1883, eight died; the second outbreak, terminating in August last, only led to one fatal attack. At Little Hallingbury, with a population of 500, there were between June and November, 1885, 63 attacks, of which 11 terminated fatally, the largest prevalence being during August and again in the last week of October. Between the ages of three and thirteen years the percentage of mortality was 25·0; between thirteen and twenty years it was 7·7. The origin of the disease was obscure, for throat affections allied to diphtheria were at the time prevalent in adjoining parishes, and the sanitary circumstances of the first house invaded were bad. The spread of the infection could, however, be easily traced to personal communication; slight cases of non-membranous sore-throat being apparently, in several cases, the links in the chain of diphtheria infection from person to person. But the question of the spread of the infection through the agency of water is also discussed, Dr. Turner, the medical officer of health, having drawn Mr. Sweeting's attention to a curious sequence of cases along the side of a stream which, on the one hand, received sewage from an infected house above, and, on the other, was resorted to for water a little lower down by those who were subsequently attacked. The facts of the case are stated, but it is admitted that they are by no means conclusive. In the *Hemel-Hempstead Rural District*, 13 deaths from throat malady occurred in 1885, school influence largely aiding in its spread, and this especially at Apsley End. In view of this, the health officer advised the closing of the school there, but the advice was not acted on. The actual power of closing a school, subject to an appeal to the Education Department, rests with the sanitary authority, and they can, if they choose, and as they did in this case, disregard the advice of their health officer. In the *Watford Urban District*, diphtheria, which for many previous years had been comparatively absent, caused 28 deaths in 1885; but adding to these the fatal attacks from diseases like "croup," the total fatality amounted to 36. Here, again, there was much obscurity as to the origin of the disease, and locally the question of sewer ventilation was largely identified with the malady. But though the sewers are imperfectly ventilated, there seemed to be an absence of any special link between this condition and the incidence of the disease. No well-considered scheme of school closure was arranged, and the means of isolation available were not such as to secure the stay of the disease by that means. The most remarkable feature about this group of outbreaks is the fact that the disease was widely prevalent over a considerable area of Hertfordshire, and this quite irrespective of the influence of any local conditions that could be recognised. The question of an aerial diffusion and the operation of an atmospheric influence receive support from outbreaks of this character, and this especially when an exhaustive inquiry fails to ascertain the existence of any other cause.

On the Sanitary Condition of the Hollingbourn District, by Dr. PARSONS.—This rural district resembles many others in the country with respect to its imperfect drain and cesspool sewerage, to its common privy and resulting nuisance, and, in part, to its water-supply from wells, which are so situated as to be liable to excremental pollution. The medical officer of health is reported as keeping no journal or notes of his inspection or correspondence, and as making only one general and certain special inspections of his district annually. The information he receives from the registrars is useless, except for mere statistical purposes, and no lists of pauper sickness are supplied to him. In one of the inspector of nuisance's books as many as six or eight months go by without an entry, the duties of the inspectors being,

however, fairly discharged if account be taken of the multifarious duties which detain them in other directions. Into this district scarlet fever was imported, and it prevailed from November, 1885, to April, 1886. The first case came under notice on Nov. 4th, and one official in Poor-law matters tells another official belonging to the sanitary authority about it, and proposes that food &c. should be supplied. Then the district medical officer is told not to enter the attacks in his medical relief list, but to continue attending them on behalf of the sanitary authority. The disease continuing to spread, a nurse was obtained, and the clerk and inspector of nuisances were to supply all necessaries. No report was prepared by the medical officer of health until Jan. 14th, and then he stated that the cottages affected were quite unfit for human habitation, the well unfit for use, and the ground full of cesspools. No attempt was made to isolate the sick. The story as told seems to be one of faulty administration. It is much to be regretted that conditions of house accommodation, &c., are allowed to remain unreported on until the very condition—namely, disease prevalence—which efficient sanitary administration is intended to prevent has actually been brought about. And then, although this rural sanitary authority seem, in their generosity, to have gone beyond their functions in supplying things which were out of their province, yet they appear to have forgotten that their special duty is to prevent disease. From this point of view, whether the action of one or other of the parties concerned is looked at, the steps taken can, as the report says, "only be regarded as a costly failure." Tents, it appears, are kept at the workhouse "for the isolation of small-pox cases." But when scarlet-fever prevails, a disease which kills a far larger number of human beings than small-pox does, and against which no special means of prevention are available, then the tents seem to be kept locked up. What is really wanted in these rural districts is a small amount of isolation accommodation of a permanent character, and this, it must above all things be remembered, should always be available for use at a moment's notice. Then if each officer, whether Poor-law or sanitary, knows what are his special duties, but little difficulty should arise in checking such a prevalence at the onset.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5733 births and 3213 deaths were registered during the week ending July 10th. The annual death-rate in these towns, which had been equal to 16·8, 17·0, and 17·6 per 1000 in the preceding three weeks, further rose last week to 18·4. During the thirteen weeks of last quarter the death-rate in these towns averaged only 18·6 per 1000, and was 2·9 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 11·7 in Wolverhampton, 11·8 in Huddersfield, 12·6 in Brighton, and 13·1 in Sunderland. The rates in the other towns ranged upwards to 22·3 in Cardiff, 23·7 in Blackburn, and 25·2 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding four weeks from 263 to 333, further increased (under the influence of the recent intense heat upon infantile diarrhœa) to 477; they included 225 from diarrhœa, 116 from measles, 58 from whooping-cough, 33 from scarlet fever, 27 from "fever" (principally enteric), 18 from diphtheria, and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Huddersfield or in Halifax, whereas they again caused the highest death-rates in Bolton, Portsmouth, and Preston. The mortality from diarrhœa showed a further considerable increase upon the low rates recorded in recent weeks, and showed the largest excess in Salford, London, and Wolverhampton. Measles caused the highest death-rates in Portsmouth, Bolton, and Preston; and "fever" in Portsmouth, and Cardiff. The deaths from diphtheria in the twenty-eight towns included 14 in London. Small-pox caused no death either in London and its outer ring or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had declined in the preceding three weeks from 31 to 14, were 12 on Saturday last; 3 cases were admitted to these hospitals during the week, against 4 and 2 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 184, 194, and 197 in the preceding three weeks, declined again last week to 190, and were 17 below the corrected average. The causes of 81, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Bristol, Brighton, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Sheffield, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·2 and 20·8 per 1000 in the preceding two weeks, declined to 19·7 in the week ending July 10th; this rate exceeded, however, by 1·3 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 14·7 and 16·7 in Dundee and Greenock, to 28·6 in Paisley and 29·5 in Perth. The 471 deaths in the eight towns showed a decline of 43 from the number in the previous week, and included 24 which were referred to diarrhœa, 17 to whooping-cough, 11 to measles, 7 to scarlet fever, 2 to "fever," (typhus, enteric, or simple), 2 to diphtheria, and 1 to small-pox; in all, 64 deaths resulted from these principal zymotic diseases, against 65 and 59 in the preceding two weeks. These 64 deaths were equal to an annual rate of 2·6 per 1000, which was 0·1 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 21 and 10 in the previous two weeks, rose again last week to 17, of which 14 occurred in Glasgow and 2 in Edinburgh. The deaths from measles, on the other hand, which had been 20 and 15 in the previous two weeks, further fell last week to 11, and included 8 in Edinburgh. The 7 fatal cases of scarlet fever showed a decline of 3 from the number in the previous week, and included 4 in Glasgow and 3 in Edinburgh. The 2 deaths from diphtheria were returned in Edinburgh, and the 2 from "fever" in Glasgow; both numbers were considerably below the average. The death classed to small-pox was certified as chicken-pox, and occurred in Edinburgh. The deaths attributed to diarrhœal diseases, which had increased in the previous four weeks from 7 to 16, further rose last week to 24, of which 7 were returned in Glasgow, 7 in Dundee, and 5 in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 93, 86, and 77 in the preceding three weeks, further declined last week to 74, but were 13 above the number in the corresponding week of last year. The causes of 61, or nearly 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 24·7 and 22·9 per 1000 in the preceding two weeks, rose again to 23·1 in the week ending July 10th. During the thirteen weeks of last quarter the death-rate in the city averaged 25·6; whereas the mean rate during the same period did not exceed 17·2 in London and 19·7 in Edinburgh. The 156 deaths in Dublin last week showed an increase of one upon the number in the previous week, and included 14 which were referred to the principal zymotic diseases, against numbers increasing from 5 to 12 in the preceding four weeks; 4 resulted from scarlet fever, 4 from diarrhœa, 3 from "fever" (typhus, enteric, or simple), 2 from whooping-cough, 1 from measles, and not one either from small-pox or diphtheria. These 14 deaths were equal to an annual rate of 2·1 per 1000, the rates from the same diseases being 3·6 in London and 4·1 in Edinburgh. The fatal cases of scarlet fever and of diarrhœa exceeded the numbers returned in any recent week, while those of "fever" and of whooping-cough were fewer than those in the previous week. Eight inquest cases and 9 deaths from violence were registered; and 59, or more than a third, of the deaths were recorded in public institutions. The deaths of infants and of elderly persons showed a considerable decline from the numbers in the previous week. The causes of 12, or 8 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

THE APPROPRIATION OF PATIENTS BY CONSULTANTS.

To the Editor of THE LANCET.

SIR,—I read with interest in your issue of July 10th the letter of my friend Mr. Henry Kesteven and your remarks upon the subject of "Consultants *v.* General Practitioners." Isolated examples of the injustice of which Mr. Kesteven complains are unfortunately so common that there are few general practitioners who will not be able from bitter experience fully to endorse all he has said. The evil is an undoubted one; the causes and the remedy are not so clear. Both Mr. Kesteven's letter and your leading article contain, I think, indications of, at any rate, one of the causes of the present state of tension. In former years the class of "consultants" was largely recruited from the successful general practitioners. Having passed through the valley of tribulation himself, the consultant of those days was more in sympathy with the general practitioners; he appreciated their difficulties, and was better able to apply practically the ancient rule which bids us do to others as we would they should do to us. Of this class there are happily still many bright examples left us, but I fear they are fast disappearing, and a new and improved (?) order of men are taking their place. The consultant of the present day belongs as a rule, and especially in London, to a separate caste; his very existence depends upon his holding hospital appointments, and his whole professional training is directed towards obtaining the qualifications necessary to comply with the regulations under which such appointments are held. As a consequence, comparatively few modern consultants have passed through the salutary ordeal of general practice, and that fine feeling of sympathy is to a great extent blunted, or even lost, and that through no fault of the individual, but of the system.

An improvement in the relations at present existing between consultants and general practitioners would, I am sure, soon be observable, were some means found to induce the most able and most successful general practitioners to join the upper ranks of the profession as consultants. For the last few years the tendency has been to exclude them. Hospital and other appointments—the essentials of a modern consultant—are awarded not only for merit and professional skill, but also because the aspirant can place after his name certain cabalistic signs unobtainable by the general practitioner as such. We are now beginning to feel the result of such exclusiveness, and are suffering as a profession as much from the "war of class against class" as the political world.

I am, Sir, yours truly,

J. FREDK. W. SILK.

Victoria House, Highgate Hill, N., July, 1886.

To the Editor of THE LANCET.

SIR,—In your issue of July 10th I read a letter from Mr. Kesteven, and a leader by yourself, on that ever-recurring question—the relationship of the specialist to the generalist. One cannot but sympathise with Mr. Kesteven on his having been the victim of ingratitude at the hands of those to whom he referred his patients; but perhaps he has not allowed quite enough for the operation of that force to which he calls attention—namely, the mendacity of the medium between the practitioner and the consultant—viz., the patient. A plausible explanation would occupy too much of a busy physician's time to verify or disprove, and so, in the push and hustle of work, a patient is examined and the fee pocketed without much thought being given to the original source of the income—to wit, the family practitioner. To one who draws his livelihood from a circumscribed neighbourhood the loss of even one patient is no doubt a consideration, but scarcely a serious consideration; for how many patients does one lose in this way? From a sufficiently large experience of general practice, I think I may say not many. The key of the situation lies, not in the conduct of the consultant, but in the confidence of the public, and it is only by the general practitioner gaining in an ever-increasing degree this confidence that he can hope to compete successfully with the consultant. Relieved of responsibility in critical situations, the family practitioner has in some instances become inefficient to meet the crisis, from a long habit of thinking that in such and such a case Mr. A. or Dr. B. can be sent for; others, anxious and quite possibly able to act efficiently, the tradition of his class being unable to cope with difficult cases, withhold that public confidence which confers at once responsibility and status, and conduces to efficiency on the part of the practitioner. In the words of our immortal poet, "It is not in our stars, but in ourselves, that we are underlings," and the remedy of the situation appears to me to lie in the generalist evincing by word and deed his absolute equality with any other section of the profession, rather than by his desiring a perpetual protection from the consultant.

I am, Sir, yours obediently,

Green Lanes, N., July, 1886. ALEXANDER MORISON, M.D.

SPINA BIFIDA CASES.

To the Editor of THE LANCET.

SIR,—Since my last communication to you on this subject, I have operated upon other two cases, one of these on June 10th, which is now contracted and safe, the other only yesterday (July 8th), the result of which cannot be known for two or three weeks. Yesterday also the following letter reached me from Rio de Janeiro, Brazil, dated June 10th, 1886:—

"DEAR SIR,—In THE LANCET of May 8th, I note your letter with reference to the cure of spina bifida by means of the iodo-glycerine fluid. I beg to place at your disposal the following notes of a successful case I had, which was treated solely by your method: Henrique M——, born March 4th, 1885, with a lumbar spina bifida, about the size of a half orange. A strong well-made child, with no other deformity. On March 12th, tumour *in statu quo*. I tapped it with a fine trocar and cannula, and drew off about two drachms of fluid, and then injected about half a drachm of the fluid containing ten grains of iodine and thirty of iodide of potassium to one ounce of glycerine. On withdrawing the cannula I sealed up the puncture with collodion. No injurious effect followed. One week after, the operation was repeated, and likewise a third time. After each operation the coverings became more thickened and corrugated, until a fortnight after the third tapping no trace of fluid was present, and the tumour was reduced to a flattened, fleshy, wrinkled mass. After a lapse of fifteen months it is still further diminished in size, and the child is as plump and lively as possible, showing no sign of weakness anywhere. I regret that my experience of such cases is limited to this case only, but observing your letter above mentioned, and especially the quotation from the *Dublin Medical Journal*, I consider it my duty to inform you of this, another case, in which your method has proved eminently successful.

"Believe me, dear Sir, yours very sincerely,

(Signed) "W. LOUDON STRAIN, M.B. GLAS.,
"Late Resident Assistant, Glasgow Western Infirmary.
"James Morton, M.D."

I may be allowed to call attention to the early age at which this case was treated, of which I entirely approve, and to express the pleasure which such success in the hands of others always gives me.

With thanks to Dr. Strain, I am, &c.,

Glasgow, July 9th, 1886. JAMES MORTON.

THE CHARTERHOUSE SCHOOL.

To the Editor of THE LANCET.

SIR,—The correspondence in *The Times* during the past week respecting diphtheria at the Charterhouse School cannot fail to greatly interest the medical profession. A great deal of an unpleasant nature has come to the surface, but, judging from Mr. Carritt's letter in Wednesday's *Times*, much more lies behind yet unrevealed, which he promises to disclose if the governors of the Charterhouse School will hold an inquiry into the matter. So far as we can now judge, when the boys were going home for their exeat on June 26th, Mr. Carritt was told that measles existed in the school, and was asked if his son might come

home. When the lad arrived he told his father there were two cases of diphtheria in Mr. Girdlestone's house; one of these died in three days, the other remaining ill till he was able to be moved within the past seven days. The head master, in his letter on Monday, acknowledges these two cases, and says that seven others had sore-throats with diphtheritic tendency. The question raised by Mr. Noble Smith in *The Times* on Wednesday is the chief one, and really means "Who is to blame?" As undoubted diphtheria existed at the time of the exeat, why were not the parents told before the boys went home on June 26th? Why were not these two cases, at any rate, moved to the sanatorium? It appears terrible that they should lie ill on the same floor as the cubicles.

I hear that a consultant was called in some days before the *exeat*, and has been there several times. How is it he has not told us if he found the house free from any suspicion of bad drainage? Did he find the arrangements made for nursing and for preventing the spread of the disease all satisfactory! Did he think only two boys had plain diphtheria? and how many cases of sore-throat, simple or suspicious, did the medical officer report as having occurred in the past few months in the school? Was it by his advice parents were not told of the existence of diphtheria? All these are questions which require replies; and a letter from a consulting physician would set many anxious minds at rest.

Mr. Noble Smith thinks Dr. Clarence Haig-Brown had not full power to enforce his regulations, because the boy was not removed from Mr. Girdlestone's house, and inquires if his recommendations were carried out. Let us hear what those recommendations were, as it is plainly hinted in his letter that there was divided authority.

The medical profession cannot discuss the head-master's treatment of Mr. Carritt; but the other questions raised, especially the sanitary arrangements and the medical management, must interest all of us.

I am, Sir, yours obediently,

July 13th, 1886. M.D., AN OLD PUBLIC SCHOOL MAN.

REMARKABLE CONCOMITANT OF HYDROCELE-TAPPING.

To the Editor of THE LANCET.

SIR,—On reading one of your annotations of July 3rd on a "Remarkable Accident while Tapping a Hydrocele," I thought probably it would not be uninteresting to record the following case, as I am in the same position as M. Loumeau in not finding an example of a similar kind in medical literature.

The Rev. ——, who lived in the north of Devon, regularly visited me twice yearly for more than twenty years for the purpose of being tapped for hydrocele of the right side. His visits in my neighbourhood being always very short, he preferred merely to be relieved of the fluid, and generally about a pint of serum was removed at each tapping. He had an inguinal hernia of the same side. About ten years ago, in the month of July, this gentleman came to me as usual, and, on passing the trocar, to my astonishment only about a tablespoonful of fluid escaped. I concluded I had penetrated a cyst, and might have injured the tunica albuginea. As he was going into Cornwall direct from my house, and would return in three days, I advised no further procedure until he came back. The tapping occurred on a Saturday. On the following Tuesday, he told me that on reaching Penzance he began to feel a stiffness in his right knee, which became painful, but not sufficient to prevent him from helping in clerical duties on Sunday. Large effusion in the joint followed—in fact a perfect hydrops articuli; but I found that the hydrocele had entirely disappeared. Three days' rest, with fomentations &c., quickly relieved the joint. About six months after this, my patient was about to pay his usual visit for the tapping, when, on driving to the nearest railway station, his horse stumbled and he was thrown out of his gig, injuring his right knee, which became very swollen. Again the hydrocele disappeared.

This gentleman has recently died at an advanced age, but for several years after the accident of the gig I used the trocar for his relief. I have mentioned this case to several eminent provincial surgeons, and have been told that, as far as they knew, it was unique.—I am, Sir, yours truly,

EDWIN J. WORTH, M.R.C.S. Eng., &c.

Millbrook, Cornwall, July 7th, 1886.

IRELAND.

(From our own Correspondent.)

THE VICE-PRESIDENCY OF THE ROYAL COLLEGE OF SURGEONS.

MR. FITZGIBBON, surgeon to the City of Dublin Hospital, who retired from the contest for the vice-presidency last June in favour of Mr. Corley, considering this gentleman to have prior claim on the electors, will be a candidate for the vice-presidency in 1887. It is rumoured that Mr. Fitzgibbon will be opposed by a gentleman belonging to the hospital with which he is connected.

REPRESENTATION OF THE UNIVERSITY OF DUBLIN IN PARLIAMENT.

Both the late representatives have been re-elected by overwhelming majorities. Although every exertion possible was used by the defeated candidates, they were only able, out of a constituency of some 4000 electors, to obtain fifty-five and fifty-six votes respectively.

REMOVAL OF A FOREIGN BODY IMPACTED IN THE THROAT FOR THREE MONTHS.

A little girl aged three years was recently admitted into the Adelaide Hospital, under the care of Mr. J. Kellock Barton. It appeared that about three months previously the shuttle of a sewing machine had got impacted in her throat close to the epiglottis, and latterly had caused symptoms of distress. On last Friday Mr. Barton tried to remove it with a throat forceps, but from the nature of the foreign body the attempt was unsuccessful, and the next day an operation was undertaken. An incision was made on the left side of the neck passing close to the corner of the hyoid bone, and after a difficult dissection the shuttle was removed. The parts were brought together by sutures, and since the operation the little patient has progressed satisfactorily.

MATER MISERICORDIÆ HOSPITAL.

The new wing is now nearly completed, and is expected to be finished early in August. It forms the third side to the hospital, and will comprise three floors. The total expenses incurred will amount to about £20,000.

LIMERICK WORKHOUSE: CRUELTY TO AN INMATE.

At the Limerick Assizes last week, Mary Gurney, a night nurse in the female department, and Mary Fitzgerald, a pauper assistant, were charged with killing, on the 29th of April last, one Margaret Bourke, an old blind inmate of the Limerick Workhouse Hospital. Evidence was given that the deceased fell out of bed and was allowed to remain on the floor for a considerable time before the accused put her back, and when they did her hands were tied together. Bourke died the next morning, and the jury having found the prisoners guilty, Mr. Justice Johnson sentenced Gurney to two months' imprisonment, and Fitzgerald, who had been some time in prison, to three weeks.

It is rumoured that Dr. F. MacCabe, medical adviser to the General Prisons Board, has been appointed Inspector of Reformatory and Industrial Schools, Ireland.

Dublin, July 13th.

PARIS.

(From our own Correspondent.)

THE RELATION OF ORCHITIS AND OVARITIS TO AMYGDALITIS.

DR. JOAL, one of the physicians of Mont-Dore, has lately published a work in which he makes a very important contribution to pathology, in showing the relation that exists between orchitis and ovaritis on the one hand, and amygdalitis on the other. Dr. Joal makes out that during an attack of amygdalitis complications in the genital organs may arise as in other general affections. When these supervene, they are not the result of metastasis, as was formerly supposed, but they are all three produced by one and the same cause—an infectious condition of the economy,—the three maladies named being manifestations of that condition. Laségue, Bouchard, Landouzy, and Siredey considered that

amygdalitis was the expression of a general malady of an infectious nature, but they looked upon orchitis and ovaritis as complications. Dr. Joal, however, proffers the explanation that, the organism being primarily contaminated, bacterian explosions are produced in a secondary manner in divers organs—the tonsils, ovaries, and testicles. The author does not admit the pretended physiological relations that were said to exist between the tonsils and the genital organs, adding that if the tonsils and the testicles are affected at the same time, it is generally during adolescence, at the age when these glands present a functional hyper-excitability. The author founded his arguments on fourteen cases of orchitis, or of ovaritis, which came under his own observation, and which manifested themselves under the influence of the tonsillitic affection, which, in its turn, was the result of an infectious condition of the organism, as mentioned above. This conclusion was arrived at as the genital symptoms could not be attributed to the propagation of a previously existing hyperæmic condition of the neighbouring organs—urethra, bladder, and uterus; nor could they be attributed to traumatism, excessive fatigue, or to menstrual or other genital disorders. Neither could they have been traced to the influence of any general affections, such as typhoid fever, variola, rheumatism, or purulent infection, which are apt to provoke orchitis or ovaritis. The etiology of tonsillitic ovaritis and orchitis has been well studied, and the symptomatology of these diseases has also been well described by the author. The genital manifestations, he says, are independent of the gravity of the tonsillitis, showing themselves ordinarily at the moment when the tonsillitic phenomena are on the decline. The complications, which are rare in childhood, appear principally in adolescence; they are generally unilateral. Orchitis ordinarily terminates in resolution; in one case, however, there was suppuration; in another the testicle was atrophied.

M. PASTEUR.

That cases simulating hydrophobia may now and then occur is not to be wondered at, owing to the sensation caused by M. Pasteur's anti-rabic inoculations. At a recent meeting of the Council of Public Hygiene Dr. Dujardin-Beaumetz gave an account of two such cases that were observed at the Hôtel Dieu. One of the patients admitted to the hospital on the 24th of May presented all the symptoms of alcoholic delirium, but left the hospital two days after, quite cured. He had been bitten fifteen days previously by a dog that was not mad. In one of his fits of delirium, the patient tried to bite the people about him. It was this circumstance that led to the supposition that the man was hydrophobic, but Dr. Dujardin-Beaumetz stated that in all the cases of hydrophobia that came under his observation he never saw hydrophobic patients attempt to bite people about them, and he believed that whenever such symptoms are produced, we have to do, not with hydrophobia, but with alcoholism. He remarked that last year, at the Lariboisière Hospital, a male patient who was affected with rabies bit the attendants, but he was at the same time under the influence of alcoholism, and it was to this latter condition that his tendency to bite must be attributed. The second case was that of a man who was taken to the Hôtel Dieu, stating that he had been bitten some time ago by a dog, and that he felt the symptoms of hydrophobia coming on. It was found, however, that he was simply suffering from some gastric trouble, and four days after his admission he left the hospital perfectly cured. The author observed that this individual had the year previously been admitted to the Necker Hospital, where he also simulated hydrophobia for some days. In concluding his report, Dr. Dujardin-Beaumetz stated that since the 1st of January, 1886, there have been in the department of the Seine ninety persons bitten by dogs known to have been manifestly mad, and that only one of these persons, who had not had recourse to the inoculations practised at the laboratory of M. Pasteur, died from hydrophobia. On this the author makes the following remarks: "One cannot bring this remarkable fact too much to light, in presence of the incessant attacks that are directed against the method of our illustrious colleague. On the one hand, the absolute immunity of all the persons who, after having been bitten by mad dogs during this first half-year, had recourse to the inoculations, and, on the other hand, the verification of only one death, that of the individual who would not submit to this method of treatment, are striking proofs of the certainty and of the efficacy of these inoculations. So that it will not be too much to remind the Parisian population that it will for the future find in these inoculations, when they are opportunely practised, a sure protection against rabic accidents." Dr. Dujardin-Beaumetz added that, according to information that reached him, there had been in London since the 1st of January last seven deaths from hydrophobia. In 1885 the number of deaths from the same disease in London amounted to twenty-six. The number of deaths from hydrophobia in the department of the Seine during the same year was twenty. While on the subject of M. Pasteur's anti-rabic inoculations, I may note certain modifications that have been introduced by him since he first commenced them, and which I have taken from Dr. Grancher's lecture, reported in THE LANCET of last week. The rabbits to be inoculated are put under chloroform during the operation of trephining and inoculation, which are effected on aseptic principles. The wound, instead of being washed out with carbolic acid, which would destroy the virus, is simply moistened with the acid. The bottles in which the spinal cords are preserved are now closed at the lower opening by a piece of cotton-wool, instead of having a tap, as formerly. M. Pasteur practises only ten inoculations, instead of thirteen, as in the case of Meister, his first patient. The inoculations are performed once every day, thus leaving an interval of twenty-four hours after each inoculation. The first inoculation is made with a spinal cord that has been preserved fifteen days, the second with a cord fourteen days old, and so on. The last inoculation is made with a cord six days old. M. Pasteur inoculates from cords which have been preserved for only from one to five days those cases where the wounds resulting from the bites are especially dangerous, on account of the region they occupy, their number, or the death of tissue injured.

Paris, July 13th.

THE SERVICES.

SURGEON-MAJOR EVATT, medical officer to the Royal Military Academy, will vacate his appointment on the staff of that institution next week, and will be succeeded by Surgeon-Major Maxham.

ADMIRALTY.—The following appointments have been made:—Fleet Surgeon Henry F. Norbury, C.B., to the *Impregnable;* Fleet Surgeon Robert H. More, M.D., to Plymouth Hospital; Surgeon Jas. L. Smith, to the *Starling;* and Surgeon and Agent Patrick C. Hockey, to Kilkee.

ARTILLERY VOLUNTEERS.—1st Inverness-shire: Surgeon A. Selanders, M.D., is granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—1st Volunteer Battalion, the Essex Regiment: Acting Surgeon M. H. Grattan resigns his appointment.—1st Sussex: Surgeon Willoughby Farner resigns his commission; Acting Surgeon Douglas William Giffard to be Surgeon.—2nd Volunteer Battalion, the Royal Warwickshire Regiment: Surgeon Clement Dukes, M.D., is granted the honorary rank of Surgeon-Major.—2nd Wiltshire: Acting Surgeon E. N. Carless, to be Surgeon.—2nd Volunteer Battalion, the Worcestershire Regiment: Surgeon W. S. Batten and Honorary Assistant-Surgeon S. Roden, M.D., resign their commissions.

THE VOLUNTEER MEDICAL STAFF CORPS.—Surgeon J. H. Casson is granted the honorary rank of Surgeon-Major.

THE DEAF AND DUMB ASYLUM.—An election of twenty children to the benefits of this institution took place on the 12th inst. The asylum was founded in 1792, and since that date 4743 children have been admitted, leaving 319 now in the institution. Since the year 1811, 1848 boys and girls have been bound to various trades, at a cost of upwards of £17,276. The committee have decided to enlarge the branch asylum at Margate, and they are rebuilding the asylum in the Old Kent-road. At Margate, too, a separate building is being erected for an infirmary.

BELFAST MEDICAL STUDENTS' ASSOCIATION.—The inaugural meeting of this Association was held on the 13th inst., when there was a large attendance of students and medical men of the town. The object of the Association is to promote the interests of the Belfast medical students as regards their professional training.

Medical News.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held on the 5th inst. and following days, the undermentioned gentlemen passed the Third Professional Examination of the College:—

John Abbott, James J. Behan, Edward C. Brabazon, Thomas Carr, Thomas R. Cowen, Stafford M. Cox, Eugene Glynn, Arthur S. Goff, Richard J. Hewitt, George L. Johnston, Leonard Kidd, Victor E. Ludlow, Charles C. Lyons, John J. McNaboe, James C. O'Donnell, Pierce H. Power, John H. Reynolds, Michael Shanley, Arthur E. Sprowle, John Stewart, Timothy T. Teahan, James Trant.

Fifty-nine candidates entered for examination; seven withdrew, one was absent, and twenty-five were stopped.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 8th inst.:—

Agnew, Edward Dalton, Soho-square.
Armstrong, William, Limefield, Kersal, Manchester.
Blake, William Henry, Brondesbury Villas, Kilburn.
Drinkwater, Charles, Memorial Cottage Hospital, Mildmay.
Smith, Percival, Hanley-road, Crouch-hill.

ON the 9th inst. Princess Christian visited University College Hospital and inspected several of the wards.

THE annual inspection of the Leavesden Asylum for Imbeciles by the managers of the Metropolitan Asylums Board took place on the 10th inst.

THE prizes gained by the students of the Bristol Medical School were distributed on the 12th inst. by the Rev. S. W. Wayte, who pointed out that the school was almost, if not quite, the earliest provincial school of medicine in the country.

AT the quarterly meeting of the Directors of the Naval Medical Supplemental Fund held on the 13th inst., Sir W. R. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £67 was distributed among the several applicants.

DR. GEORGE T. STEVENS, of New York, has been awarded the prize offered by the Académie Royale de Médecine of Belgium for the best elucidation, by clinical facts and by experiments, of the Pathogeny and Therapeutics of Diseases of the Nervous Centres, and especially Epilepsy.

THE CONDITION OF KINGSTON-ON-THAMES, from a sanitary point of view, is the subject of unfavourable comment in the local press. The state of the public sewers in the borough, especially, would appear to stand in need of immediate attention.

MR. ROBERT ROGERS, L.K.Q.C.P.I., L.R.C.S.I., of Falmouth, Jamaica, expired suddenly whilst bathing on the 11th ult. The deceased had practised for upwards of fifteen years in Jamaica, and was highly respected by those with whom he came in contact.

"THE Effects of Tobacco on the Health of Men of Letters, and its Influence on the Future of French Literature," is the theme to be discussed in a series of essays, for the best of which the French Society for the Prevention of the Abuse of Tobacco offers a prize of 1000 francs.

THE combined districts of Leamington, Warwick, Kenilworth, and other places in the Warwick Union, have decided on a site for an infectious hospital. Hitherto a building at the Warwick Workhouse has been resorted to for this purpose, but its Poor-law connexions have materially interfered with its proper use.

PROFESSOR CROCQ OF BRUSSELS.—The senior medical students of the University of Brussels have just presented Professor Crocq with a work of art, "Le Penseur," after Michael Angelo, as a mark of their appreciation of the unceasing kindness with which he has assisted them in their university and clinical studies.

AT the tenth anniversary meeting of the Sanitary Institute of Great Britain, held on the 8th inst. at the Royal Institution, Albemarle-street, Dr. T. Whiteside Hime, medical officer of health for Bradford, delivered an address entitled "Pasteur and Preventive Inoculation against Zymotic Diseases." A vote of thanks to Dr. Hime for his address was proposed by Professor Corfield, and carried.

A SHEFFIELD police-constable and a little girl, having been bitten by a dog suffering from rabies, left on the 10th inst. for Paris to place themselves under the treatment of M. Pasteur.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The annual general meeting will be held in the rooms of the Medical Society, Chandos-street, Cavendish-square, on Aug. 9th, 1886, under the presidency of G. H. Savage, M.D. In the evening the dinner will take place at "The Ship," Greenwich, at 7 P.M.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY. At the meeting of the Committee of Management of this institution held on the 3rd inst., it was reported that during the first three months of the present year only 280 in-patients were admitted to the hospital, or 56 fewer than had been received during the corresponding three months of the previous year; whereas 347 patients were received during the second three months, bringing the total of the half-year up to 1127, or 11 in excess of the first half-year of 1885. The number of out-patients received was 71. The financial condition of the hospital is fairly satisfactory.

EARLSWOOD ASYLUM FOR IDIOTS.—The annual report of the committee of this institution, which has just been published, states that the income of the past year has fallen short of the previous year by some £2600. The report of the medical superintendent (Dr. Cobbold) is of a satisfactory character, and shows that there were in the asylum on March 31st 378 males and 188 females. The number of new patients admitted was greater than for several years past; this is chiefly due to the fact that no less than forty were elected in April and October. A decided improvement is reported in the class of cases admitted.

TEMPERANCE CONGRESS.—The British and Colonial Temperance Congress began its sittings on the 14th inst. The object of the Congress is to receive information, through written papers and oral communications, regarding (1) the extent of drinking habits in the colonies and dependencies of the British Empire; (2) the regulations in force in those localities for restricting or prohibiting the drink traffic; and (3) the results of efforts put forth by temperance organisations, churches, Sunday schools, educational boards, and other public bodies, for the promotion of total abstinence from intoxicating liquors. The Bishop of London presided, and there was a large attendance at the opening meeting. Papers were read by Dr. Pringle, the Rev. R. H. Bullock, Mr. Gunn, Mr. Barton, and others.

THE magisterial examination into what is known as the Ashton poisoning case was concluded at Stalybridge on Wednesday. The prisoners, Mary Ann Britland and Thomas Dixon, were accused of having caused the deaths of three persons by administering poison. Evidence was given that Dixon's wife and Britland's husband and daughter died within a short time after a brief illness. All displayed symptoms of poisoning. The bodies were exhumed and subjected to analysis, and were found to contain strychnine. It was proved that the female prisoner had made several purchases of "Vermin Killer," one of the ingredients of which is strychnine. The theory of the prosecution was that Dixon's wife and Britland's husband had been removed to make way for a union between the prisoners. The magistrates discharged Dixon, and committed the female prisoner for trial on the capital charge.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARRITT, G. LACY, M.R.C.S., L.R.C.P. Lond., has been appointed Honorary Surgeon to the Johnson Hospital, Spalding; and Medical Officer of Health for the Spalding District, vice C. K. Morris, resigned.

BRODRICK, H. EDWARD, M.R.C.S., has been appointed Resident Clinical Assistant to the East London Hospital for Children and Dispensary for Women, Shadwell, E.

BUTLER, FRANCIS WILLIAM, M.R.C.S., L.S.A., has been reappointed Surgeon to the Hearts of Oak Society for the Brighton District.

CARTER, ROWLAND WIMBURN, M.R.C.S., L.S.A., has been appointed Surgeon to the Weymouth and Dorset County Royal Eye Infirmary, vice Simpson, resigned.

CUFF, ROBERT, M.B.Lond., M.R.C.S., has been appointed Medical Officer for the Workhouse of the Scarborough Union.

FAIRBAIRN, J. BINNIE, M.B.Glas., has been appointed House-Physician to the Glasgow Royal Infirmary.

HEWITT, FREDERIC, B.A., M.D.Cantab., has been appointed Instructor in Anæsthetics at the London Hospital.

LEECH, ARTHUR H., L.S.A., has been appointed Medical Officer for the Second District of the Stow Union.

OGLE, ARTHUR W., M.R.C.S., L.R.C.P., L.S.A., formerly Obstetric House-Physician, has been appointed House-Physician to the Middlesex Hospital.

PERRY, E. C., M.A., M.B.Cantab., M.R.C.S., has been appointed House-Surgeon to the London Hospital.

PURDON, RICHARD J., M.D., M.Ch. R.U.I., has been appointed Visiting-Physician to the Belfast District Lunatic Asylum, vice Henry MacCormac deceased.

SCOTT, W. SAWERS, M.B., C.M., has been appointed Resident House-Surgeon to the Clinical Hospital, Manchester.

WARE, GEORGE STEPHEN, M.R.C.S., L.R.C.P., L.S.A., formerly House-Physician, has been appointed Obstetric House-Physician to the Middlesex Hospital.

WETWAN, WILLIAM A., M.R.C.S., L.S.A., has been appointed Medical Officer for the Workhouse and First District of the Bridlington Union.

Births, Marriages, and Deaths.

BIRTHS.

ATKINSON.—On the 7th inst., at Abbey-hill, Kenilworth, Warwickshire, the wife of Miles C. Atkinson, M.D., of a son.

CHETWOOD.—On the 12th inst., at King-street, Finsbury-square, the wife of William Chetwood, M.R.C.S., of a daughter.

FREEMAN.—On the 3rd inst., at Pangbourne, Reading, the wife of W. T. Freeman, L.R.C.P.Lond., of a daughter.

JOYNT.—On the 18th ult., at Marine-gardens, Hanover-street, Kingston, Jamaica, the wife of Surgeon-Major H. W. Joynt, Army Medical Staff, of a son.

LEWINSON.—On the 7th inst., at 32, New-street, Smethwick, the wife of Louis Lewinson, M.D.Berl., of a son.

PIDCOCK.—On the 6th inst., at Downshire-hill, Hampstead, N.W., the wife of G. Douglas Pidcock, M.A., M.B.Cantab., of a son.

POWELL.—On the 3rd inst., at the Borough Asylum, Nottingham, the wife of Evan Powell, of a son.

RICHARDS.—On the 11th inst., at the County Asylum, Hanwell, the wife of J. Peeke Richards, Medical Superintendent of the Female Department, of a daughter.

MARRIAGES.

BIRCH—KINSMAN.—On the 7th inst., at the Parish Church, West Derby, Richard Birch, M.R.C.S., L.R.C.P., to Anne, only daughter of Major W. A. Kinsman, of The Tower, Sandfield-park, West Derby.

BOWHAY—WOODD.—On the 10th inst., at St. John's, Penge, Albert Bowhay, L.R.C.P.Lond., of Gunnislake, Cornwall, to Edith, daughter of C. G. Woodd, Surgeon, of Penge.

FELL—RICHMOND.—On April 26th, at St. Paul's Cathedral, Wellington, New Zealand, Walter Fell, M.D., of University College, Oxford, and St. Thomas's Hospital, London, to Margaret, third daughter of Mr. Justice Richmond, of Wellington.

FOX—BABINGTON.—On the 8th inst., at the Church of the Holy Trinity, Ilfracombe, Arthur E. W. Fox, M.B., to Emily Frances, youngest daughter of the Rev. Thomas A. Babington, of Cossington, Leicestershire.

HAYWARD—KENDRICK.—On the 6th inst., at All Saints', Brixham, Arthur Ernest Hayward, M.R.C.S., to Catherine Eames, youngest daughter of W. G. Kendrick, of Hillside, Brixham.

HEWER—EVERARD.—On the 13th inst., J. Langton Hewer, M.B., B.S., F.R.C.S., eldest son of John H. Hewer, of 33, Highbury New-park, to Annie M. Everard, eldest daughter of the Rev. George Everard, M.A., Vicar of Christ Church, Dover.

INGOLDBY—WILCOXON.—On the 13th inst., at Albany, W. Australia, Frederick John Ingoldby, M.R.C.S., L.R.C.P., to Annie May, elder daughter of C. Wilcoxon, of Barnes.

TILLY—PRATT.—On the 7th inst., at Holy Trinity, Finchley-road, Alfred Tilly, L.S.A., to Emma Marian, eldest daughter of the late James Boulton Pratt, of Earl's-terrace, Kensington, and the Stock Exchange.

DEATHS.

DUNN.—On May 8th (after a few hours' illness), at Hastings, New Zealand, George Dunn, M.D., J.P., of London, and formerly of Doncaster.

FURNIVALL.—On May 27th, at Hutton, Somerset, William Furnivall, M.R.C.S.Eng., L.S.A., aged 80 years.

GARDNER.—On the 17th ult., at Bareilly (by a fall from his horse), Edward Barton Gardner, Surgeon-Major, H.M.'s Indian Army, Civil Surgeon of Bareilly.

SPEER.—On the 9th inst., at his residence, Salisbury-street, Liverpool, Joseph Speer, L.R.C.P.Ed., L.R.C.S.I., aged 57.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, July 15th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
July 9	30·00	N.W.	60	55	111	70	53	...	Bright
,, 10	30·16	S.E.	61	56	112	72	54	·03	Cloudy
,, 11	30·03	W.	65	59	114	75	54	...	Cloudy
,, 12	30·01	S.W.	63	62	89	68	61	·16	Raining
,, 13	29·98	W.	62	59	116	75	53	·31	Cloudy
,, 14	29·43	S.W.	65	63	120	81	55	·19	Cloudy
,, 15	29·80	W.	61	55	93	66	54	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

Letters requiring notice must be authenticated by the name and address of the writer.

We cannot undertake to return MSS. not used.

TREATMENT OF ECZEMA.

DR. MED. HAGENA writes to call attention to the benefit of wearing buck leather underclothing, especially by those who may be suffering from eczema. The advantages, he points out, attending the use of that material are that it is softer than cotton or wool, that it diffuses a more equable warmth, and that it therefore averts irritation of the sensitive skin, and assists the process of healing to be set up by the application of an unguent composed chiefly of salicylic acid and lanoline (the Salicylpflastermull of Dr. P. G. Unna).

Mr. Jas. Turton.—Yes, by Shepherd. But perhaps the best book to consult is the Manual for the Medical Staff Corps, published by Messrs. Clowes and Son, Charing-cross, which contains all necessary information for training stretcher bearers and bearer companies.

SYPHILITIC PHARYNGITIS.

To the Editor of THE LANCET.

SIR,—I have a lady patient who has for over twenty years suffered from tertiary syphilis. She has at present a most painful dry pharyngitis, the mucous membrane is dry and sticky, here and there coated with a thick, foul, yellow mucus. This causes much coughing and great difficulty in swallowing anything but fluids. Antisyphilitic treatment, which she has had for many years, now does her no good in this present ailment. An inhalation with a Seigel's spray containing terebene nd pinus sylvestris oil does relieve her, only temporarily however, although it has in great measure healed some nasty deep fissures on both lips and left angle of the mouth. I should esteem it a great kindness if any of your many readers who may have had a similar case to deal with would suggest a line of treatment which might possibly soothe a miserable existence.

I am, Sir, yours faithfully,

July 13th, 1886. MED. DOC.

PRIMARY UNION AFTER SUPRA-PUBIC CYSTOTOMY.

To the Editor of THE LANCET.

SIR,—In your issue of July 3rd, Mr. Parker referred to primary union of the wound after supra-pubic cystotomy (in his case) as probably unique. Mr. Parker will find a similar experience recorded by Dr. L. S. Pilcher in the "Annals of Surgery," February, 1886.

I am, Sir, yours obediently,

Llanberis, N. Wales, July 6th, 1886. J. T.

A DAY IN THE COUNTRY FOR POOR CHILDREN.

MR. G. HOPKINS, Honorary Superintendent of the East London Mission, 263, Cable-street, St. George's, E., and Mr. A. Alfred Knight, Treasurer of the Hackney Mission, whose address is Knightsville, Lewisham High-road, London, both wish us to commend their schemes for giving poor children a day in the country. All such schemes should be helped by those who can help. When we are all devising holidays for ourselves and children, we should be mindful of those whose means admit of no such pleasure, and many of whom have never seen hay-making or the sea.

An Old Subscriber.—The registration of such foreign degrees as those described by our correspondent cannot take place till June, 1887.

Dr. L. Petit (Paris).—We cannot give a reply until a copy of the journal is before us.

CIRCUMCISION UNDER THE INFLUENCE OF COCAINE.

To the Editor of THE LANCET.

SIR,—I was called on May 29th, 1886, to see J. M——, a boy aged eight years, living at Portland-road, Notting-hill. I found him suffering from paraphimosis, and recommended circumcision. As the parents were quite willing, I operated on the following day (May 30th), having determined on using cocaine, as the boy's heart is diseased. Accordingly, a few minutes before the operation I injected, with a hypodermic syringe, about four drops of a 10 per cent. solution of hydrochlorate of cocaine through the prepuce, close to the corona penis, repeating this on the other side of the corona, and also injecting another five drops through the under portion of the prepuce, still keeping close to the base of the glans. I then directed the mother to hold the foreskin tight for a few minutes, in order to thoroughly anæsthetise—or "cocainise"—the mucous membrane of the prepuce. I then proceeded to circumcise the boy in the usual manner, having first placed a cloth over his eyes. After removing the redundant prepuce, I brought together the skin and mucous membrane with nine catgut sutures. The boy told me—and he is an intelligent lad—that he felt no pain at all, excepting during the insertion of the last two sutures, and then it was so slight that it did not cause him to cry out. I dressed the wound with carbolic oiled lint, and a good recovery was made. On the first evening the patient's temperature was 101·4°; next morning it was normal, and has remained so. The wound healed by first intention, excepting just close to the frænum; that had granulated, but is now quite well. The patient was in bed eight days. As has been observed, there was very little inflammatory œdema after the operation, this being due, in my opinion, to the astringent, as well as locally anæsthetic, property of cocaine. In all, I injected fourteen drops of the 10 per cent. solution, and there were no toxic effects produced.

I am, Sir, your obedient servant,

J. MITFORD ATKINSON, M.B. Lond.,
Medical Officer to No. 3 District, St. Mary Abbott's,
June 21st, 1886. Kensington.

DISTENDED HYMEN OCCLUDING THE VAGINA.

To the Editor of THE LANCET.

SIR,—I send you some particulars of a case at present under my care which may possibly be considered of sufficient interest to merit insertion in the columns of your journal.

On June 8th I was called to see Ada P——, aged thirteen, who was said to have been ill some two or three days, complaining of pain and difficulty in micturition. I found the child in intense pain, and was told that she had not passed urine for eight or ten hours previously to my visit. I examined the abdomen, which was extremely tender to the touch, and found a largely distended bladder. On examining the genitals I discovered a rounded tumour about the size of a small orange apparently protruding from the vagina, but which, on closer examination, proved to be a sac, the walls being formed by a highly distended hymen, which entirely occluded the vaginal orifice. I incised the membrane (which was thick and fleshy), thus affording exit to about half a pint of dark sanguineous fluid of the consistence of treacle. The child obtained immediate relief, and voided the contents of the bladder without difficulty shortly afterwards.

The above condition was wholly unsuspected prior to my visit, although the mother had wondered at the absence of the menstrual flow, the child having regularly presented other symptoms, usually observable during the performance of the menstrual function, for some six or eight months. Believe me, Sir, yours faithfully,

Bedale, June 10th, 1886. THOS. HORSFALL.

MR. A. B. SIMPSON AND THE BIRMINGHAM GUARDIANS.

To the Editor of THE LANCET.

SIR,—May I be permitted to mention through your columns that the Midland Centre of the Medical Defence Union is actively engaging itself in preparing a petition against the authorities' decision in this matter, which it is hoped will be signed by all the medical practitioners and chief ratepayers of the district. I hope to be able to forward you a copy of the petition in due course.

I am, Sir, obediently yours,

CHARLES F. RIDEAL, General Secretary.
The Medical Defence Union (Limited by Guarantee),
17, Bedford-row, W.C., July 13th, 1886.

THE HEAT AND RAINFALL OF INDIA.

A MEMORANDUM has been drawn up by Mr. H. F. Blandford, Meteorological Reporter to the Government of India, which is intended to accompany charts of temperature and rainfall of the country. From this report it appears that the hottest region is really the eastern coast of the Peninsula from Vizagapatam southwards and the plains of the Carnatic and Northern Ceylon. In the Peninsula, or intra-tropical India, except as modified by the elevation of the country, the temperature increases steadily from the coast inland; and the west coast is cooler than the east coast. Scinde and Rajputana are the driest portion of India. May is the hottest month of the year in the greater part of the country, the chief exception being in the Punjaub and Scinde, where, owing to the later setting in of the rains, June is the hotter month. The mean annual rainfall of the whole of India proper is about forty-two inches, varying from an extreme of nearly 500 inches at Cherra Poonjee to about three inches at Jacobabad in the extreme west. Those provinces with an average rainfall of more than fifty inches, and an average variability of less than 12 per cent. on either side of that average, enjoy practical immunity from famine.

SHIP SURGEONS.

To the Editor of THE LANCET.

SIR,—Mr. W. T. Harris, who writes on the above subject in your last week's issue, appears to have overlooked the fact that the letter of "M. A. P." to which he refers had reference to surgeons on Atlantic steamers, not to steamers going Southern voyages. I do not know any North Atlantic steamship line on which the surgeons have "absolute control of their own department." I speak from an experience of over three years. Take, for instance, the daily sanitary inspection of the steerages; this is conducted by the captain, yet when from bad weather or other causes the captain cannot leave the bridge he hands this duty over to the purser, not to the surgeon. Again, take the ships' hospitals; these ought surely to be considered part of the surgeon's department, yet there are few of the Atlantic steamships on which the hospitals are under the surgeons' control; they are constantly used as sleeping berths for stewards or others, and put to various other uses during a voyage, although the law requires that they be kept exclusively for the purpose for which they are intended, and infringements of this law are punishable by heavy fines; yet when have any of these fines been inflicted? If a surgeon mentions these or other infringements of the Board of Trade regulations in the report he has to send to the Emigration Office after each voyage he probably loses his appointment, and his report is very unlikely to reach its destination, as in most of the companies these reports have to be left open and sent to the steamship company's office for approval before being forwarded to the Emigration officer. As to vaccination fees being "a matter of agreement with a company beforehand," in the North Atlantic lines there is never any question about vaccination fees, as these vaccinations are done in compliance with a United States Government regulation, and average 8 or 10 per cent. of all steerage passengers carried. Every steerage passenger has to be examined by the surgeon, who gives to each a printed certificate of vaccination, signed by himself, and vaccinates any who either have not been previously vaccinated or in whom the vaccination marks have become indistinct. As many of these ships carry sometimes up to 1000 steerage passengers, this regulation involves an immense amount of trouble, particularly in bad weather, yet the surgeon gets no remuneration for this beyond his ordinary pay. As to "passengers' fees," an invitation to dine with the patient at his hotel after landing is the most usual way of acknowledging his indebtedness adopted by the Transatlantic passenger, if he considers it necessary to show his gratitude in any way. There are, of course, a few exceptions, but they are not often sufficient to materially augment the £8 or £10 per month which the companies consider sufficient remuneration for their medical officers.—Yours obediently,

Seacombe, Cheshire, July 12th, 1886. W. V. BARRÉ, L.K.Q.C.P., &c.

A READY EXAMINER.

THE following is extracted from *La Presse Méd. Belge*:—

IN THE EXAMINATION ROOM.—*Professor:* What would you do in the case of a uterine fibroma complicated with repeated and profuse hæmorrhages? *Candidate* (without hesitation and with confidence): I should perform oöphorectomy. *Professor:* Very good. I see you are well up in the surgery of the future. But what would you do with the fibroma? *Candidate:* I should leave it. *Professor:* Better still. But if the patient died? *Candidate:* I should bury her.

A Physician.—The case is not very clearly stated. There is a discrepancy as to the date on which the agreement was signed. If it is sent to us with correction, we shall be glad to express our opinion on it.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In your reference to my article on the "Pharmacognosy of the Nitrites" in your issue of July 10th, p. 87, I observe my name is given as Mr. Armstrong; and, further, the article in question, which appeared in the *Pharmaceutical Journal* and Transactions, was not a lecture delivered in Edinburgh, but one written specially for the journal mentioned.

I have the honour to remain, Sir, your obedient servant,

University of Edinburgh, July 13th, 1886. G. ARMSTRONG ATKINSON.

THE OVERCROWDING OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—Any man who now embraces the medical profession as a means of support will (if he is not possessed of sufficient means or luck to get him a practice) find it a matter of no inconsiderable difficulty to get on. The present congested state of the medical market reminds me of a train which, already full, is still besieged by passengers in great numbers trying for places, with no porters to prevent the influx, and plenty of ticket offices invitingly open to give tickets. If legislation curb not by some wholesome laws this influx, and if gentlemen have not common sense, but take a ticket before they see a seat vacant, our lives will become a burden not only to ourselves but in all probability to the State. Trees are too old to be transplanted at forty years; and, unfit for any other calling, because untrained for it. Some of us will have to go under the fondling care of a board of guardians, and end our days mid the wrecks of idle or dissipated lives.

Lately in your pages have complaints appeared relative to the little respect medical men are treated with. One gentleman tells us he was placed with the riff-raff of the vessel at table; he is advised by another to humbug the steward with chaff and he will be treated decently—to play jester to the whilom cabin boy for the treatment due to his profession and services! Truly, a nice occupation for a medical officer. Some time ago a gentleman was offered a ticket for out-door relief by a guardian when he asked for a pension after a life-long service as Poor-law medical officer. These instances are the natural consequences of overcrowding. Anyone who takes the trouble can easily see that the supply is far greater than the demand, if the status of the profession is to be maintained. The Army and Navy have few places to offer, the mercantile marine could nearly sink their ships with the swarms of applicants. All that remains is assistancies—a life that would contrast unfavourably with a coachman's; the work is considerably harder, the pay about the same.

In conclusion, I would say to those who intend entering on the profession, Pause, and think before you pass the Rubicon! To our Legislature, Save us from ourselves, or we perish! Apologising for trespassing on your valuable space,

I remain, Sir, your obedient servant,

John-st., W., July, 1886. GEO. TANDY WILKINSON, L.R.C.S.I., &c.

Oscans.—The Midwifery Licence is obtainable at the Rotunda and Coombe Hospitals, and is recognised as a qualification by the Irish Local Government Board.

AN UNEXPECTED CAUSE OF NUMBNESS OF THE LOWER EXTREMITIES.

To the Editor of THE LANCET.

SIR,—About two months ago I was summoned to a patient who was stated to be suffering from paralysis. On arrival I found a man about forty-six years of age lying in bed, and complaining of numbness of the feet and calves of the legs, even up to the hips, without, however, any loss of either sensory or motor power—that is to say, there was partial suspension of sensory susceptibility in these particular localities. On visiting the patient next day, I found him up and dressed, and noticed a hesitancy in his manner of walking, especially when I asked him to cross the room with his eyes closed. In fact, when he attempted it I had to jump up from my chair to save him from the fireplace. I had attended this patient for years, and there was no history of syphilis to account for all this. His general health was good, and he was a man of abstemious habits. Could it be sclerosis of the posterior or lateral columns of the cord? Could it be due to some tumour or effusion pressing on the cord? Or could it be the result of some peripheral origin, seeing that the patient had frequent attacks of "cramp in the feet"? I asked myself all these questions, when it suddenly struck me that it would not be inappropriate to inspect the premises, which I did, and found, to begin with—which to my mind was quite sufficient, hygienically speaking, at all events—the W.C. completely blocked up, and running over; a state of things which had existed for six weeks. Now, this hardly seems to bear on the case in point; but if it be considered—as I found out—that pails are substitutes for imperfect or useless waterclosets, it comes within the range of possibility that the whole weight of the upper half of the body, at least in such a position and on such a sharp edge, would tend towards the "numbing" of the sciatic and its branches. Anyhow, this patient had to resort to this method of relieving himself, and, as he described it, with extreme difficulty on each occasion, the sharp edges of the pail adhering tenaciously to the skin over the gluteal region. I suggested that the closet should be looked to at once, and that the pail should be dispensed with. All this I took care was carried out, and about a week ago the patient came to my surgery to thank me. I may add that during the course of the treatment catheterism was necessary, as also were injections to unload the rectum.

I am, Sir, yours faithfully,

London, July 10th, 1886. T. HENRY WAGSTAFFE.

"PONDEROUS BREASTS."

To the Editor of THE LANCET.

SIR,—Your correspondent, "M.B.," will find in Billroth's Clinical Surgery (published in 1881 by the New Sydenham Society), page 209, a detailed account, with illustration, of a case of enormous hypertrophy of both mammæ, and of the course of treatment attempted to be pursued.

I am, Sir, yours obediently,

Penzance, July 11th, 1886. A. B. BERRY

FREE TRADE IN ALCOHOL.

SINCE the abolition of licensing in France, in 1880, drinking shops have enormously increased. So that France competes with England and Switzerland as an alcohol-consuming country. The Academy of Medicine recommends that the trade in alcohol should be made a State monopoly.

A. G. P.—1. Our correspondent can claim a fee for the midwifery case. Such a fee has frequently been allowed. Whether in any given case the law should be put in motion is a matter for the consideration of the practitioner himself. Law is sometimes a disappointing remedy.—2. It might be legally justifiable to stop the medicine in the case specified; but if the impecuniosity is real, it would be more kind to send it, with an intimation that the patient must apply for further help to the medical officer of the parish.

Mr. Thatcher (Dalston) is troubling himself unnecessarily. As we have already said, the names were obviously fictitious.

Cymro.—No.

PART OF TOOTH-PLATE IMPACTED IN THE ŒSOPHAGUS, AND AFTERWARDS PASSED NATURALLY.

To the Editor of THE LANCET.

SIR,—On June 9th, Mrs. D——, aged sixty-five, came to see me, complaining of great pain in the throat, and difficulty in deglutition, due, she said, to having swallowed a short time before part of her tooth-plate while eating a piece of cake. On manipulating the neck a little below the cricoid cartilage she complained of great pain, especially on the left side. Nothing could be felt in the œsophagus by the finger; but on passing a whalebone probe with a piece of sponge at the end it became arrested at about six inches of its length. A coin-catcher was passed several times, but unsuccessfully; but at last it caught the edge of the plate, and after a fair amount of traction the plate turned and the extractor loosened its hold. Various forceps were then tried, but unsuccessfully, occasionally catching it, but never with sufficient firmness to move it. As some time had been spent in these attempts to extract the plate, and the patient was becoming exhausted, she was allowed two hours' rest, when a further attempt proved equally unsuccessful. It was now decided to postpone any further attempt until the following day, and, if necessary to perform œsophagotomy, after the manner successfully carried out by Sir W. Mac Cormac in the case reported in THE LANCET of May 29th. On seeing the patient on the following morning, she said, to our consternation, that the substance had passed into the stomach. Great pain was still felt on swallowing, but the foreign body had evidently left its former situation. The patient was ordered to keep perfectly quiet and to live on farinaceous food, and it was decided to wait for further symptoms. She was visited daily. She still complained of great pain in the throat and inability to take much food. To our great relief, after a sojourn in the body of three days and three hours, it was passed naturally. It was about the third part of an ordinary tooth-plate, with an ugly hook projecting from one corner, which might have led to serious consequences.

I am, Sir, yours faithfully,

Lincoln, June 15th, 1886. W. J. CANT, M.R.C.S., &c.

DISLOCATION OF CRICOID CARTILAGE.

To the Editor of THE LANCET.

SIR,—I beg to forward you notes of a case which you may perhaps think of sufficient interest to admit into your columns.

During my voyage out here, by the courtesy of the ship's surgeon, I witnessed an accident which I believe to be of rare occurrence. A lady suffering from sea-sickness was confined to her berth, and the stewardess brought her some tea in a spouted feeding-cup. She was lying on her right side, and did not turn round, but simply rotated her head to the left to receive the tea, which the stewardess held to her lips. As she swallowed the first gulp she experienced a suffocating pain in the throat, and gasped for breath. The stewardess immediately sent for the ship's surgeon, who, on seeing the case, requested me to come. The patient was lying on her back, with her chin flexed on the sternum; the face and lips were of a dark purple colour, the hands cold, and respiration rapid, shallow, and of a hard and noisy type. In the middle line in front the lower margin of the thyroid cartilage was found to be unduly prominent, while under its left margin the left side of the cricoid cartilage could be felt tilted up. It was necessary to take immediate steps for the patient's relief; so (with tracheotomy instruments at hand in the event of their being required) the ship's surgeon stood at the patient's side and manipulated the cricoid, while I extended the chin and at the same time rotated the head towards the opposite side, when suddenly there was a sensation as of something giving way, followed by a fit of coughing and vomiting, at the end of which it was found that the parts had regained their normal position, and that the patient could breathe with comfort. The accident I believe to be due to the twisted position of the neck during the action of deglutition.

I am, Sir, yours very truly,

Calcutta, June 19th, 1886. F. C. BUTT.

ERRATUM.—In Mr. Gamgee's letter on John Hunter, page 98 of our last issue, for "Henry" read *Drewr* Ottley.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. F. J. Bell, London; Dr. Whipham, London; Dr. Fenwick, London; Mr. W. Whitehead, Manchester; Dr. Norman Kerr, London; Mr. Harper, Barnstaple; Mr. J. H. Wagstaffe; Mr. Barré, Seacombe; Dr. O'Neill, Belfast; Mr. G. A. Atkinson, Edinburgh; Mr. C. H. Eyles, Newhampton; Dr. Wiglesworth, Rainhill; Mr. G. T. Wilkinson, London; Mr. J. R. Wilkinson, Leamington; Mr. P. Dunn, London; Dr. Léon Petit, Paris; Mr. Laffan, Cashel; Col. Martin; Dr. A. Morison, Highbury; Mr. J. S. Nairne, Glasgow; Dr. Bell Taylor; Dr. M. A. Boyd, Dublin; Mr. C. H. Bishop, London; Dr. Silk, Highgate; Mr. A. B. Berry, Penzance; Mr. F. C. Butt, Calcutta; Dr. B. Rake, Herne Hill; Mr. Manby, Swaffham; Mr. Taylor, Buxton; Dr. Lyon, Fence Houses; Mr. Bowen, Birmingham; Mr. Pratt, Darlington; Mr. G. D. Mackintosh, Hallaton; Mr. Lichtenfeld, London; Messrs. Dawson Bros., Montreal; Mr. Easterbrook, Fulham; Messrs. Maw, Son, and Co., London; Mr. Houde, Paris; Miss Beavan, Hay; Mr. Knightley, London; Mrs. Smith, Cheltenham; Mr. Rhodes, Glasgow; Dr. Seaton, Sunbury; Mr. White, Wolverhampton; Dr. W. W. Myers, Takow; Mr. Unsworth, Liverpool; Dr. Chadwick, Heywood; Mr. Buttersfield, Huntingdon; Dr. Fardell, Paris; Mr. Coates, Sirhowy; Messrs. Lee and Nightingale, Liverpool; Mr. Hall, Beverley; Mr. Campbell, Highbury; Mr. Ramsden, Halifax; Mr. Reed, Canterbury; Miss Lion, Highbury; Mr. Newman, Glasgow; Mr. Edmunds, Dalston; Mr. R. Freeman, London; Dr. Lyon, Houghton-le-Spring; Messrs. Haller and Co., London; Mr. Abbs, Dewsbury; Mrs. Mott, Harrow; Mr. Parkes, London; Dr. Shirtliff, Kingston-on-Thames; Dr. Swanton, Colney Hatch; Mr. Scott, Manchester; Dr. Sutcliffe; Mr. T. D. Pryce, Nottingham; Dr. J. Morton, Glasgow; Dr. Albert Wilson, Leytonstone; An M.D.; An Old Subscriber; M. W., Builth; H. S.; H.; Stretton, Kidderminster; R. S. V. P.; Med. Doc.

LETTERS, *each with enclosure*, are also acknowledged from—Sir Henry Thompson, London; Rev. E. P. Phelps, Bournemouth; Mr. Lewinson, Smethwick; Surgeon Morton, Carrick-on-Shannon; Dr. Sanderson, Swansea; Dr. Greves, Liverpool; Mr. Maw, Bradford; Mr. Colman, Leeds; Mrs. Charlton, Darlington; Dr. Foxwell; Messrs. Maclachlan and Co., Edinburgh; Mr. Greenwood, Liverpool; Mr. McGregor, Clayton West; Surg.-Major Dobson, Exeter; Hon. Mrs. Wills, Petersfield; Mr. Richards, Hanwell; Mr. Bigg, London; Mr. Popham; Mr. Luck, Lewes; Dr. Smith, Paddington; Mr. Whitley, Halifax; Mr. Bailey, Accrington; Mr. Jeffrey, Epsom; Mr. Crozier; Miss Carson, Burton-on-Trent; Dr. Lancaster; Dr. Adam, West Malling; Mr. Cowley, Upton-on-Severn; Dr. Johnston, Landport; Dr. Logan, Newcastle-on-Tyne; Mr. Rideal, London; Mr. Morris, Kingaland; Mr. Powne, Chard; Mr. Parry, Ferndale; Mr. Scott, Birmingham; Dr. Somerville, Carsphairn; Mr. Walker; Mr. Luther, Limerick; B., Basingstoke; X. Y. Z., Hackney; Sigma; J. K. L. M.; Mastoid; T. P. C.; Surgeon, Kingston-on Thames; M.R.C.S., Eastbourne; B. C. D.; P. S.; Berks, London; M. W.; Mrs. B., Leamington; Kelvin, Manchester; M. B., Edinburgh; Physician; C. J. G., Preston; Theta; J. D.; A. H. C., Burton-on-Trent; H. K. B.; Doctor, Kingston-on-Thames; M. C., Medicus, Tottenham; M. L. R.; Bayswater; A. F.; A. B. C., Sandwich; O. K.; A.; C. A.; Hele; V.; Companion; M. M.; Z. Z; Dowlais.

Sussex Daily News, Indian Daily News, La Tribune de Genève, Sussex Coast Mercury, Montrose Review, Edinburgh Evening Dispatch, Weekly Dispatch, Leicester Daily Mercury, Advocate of India, Hong Kong Daily Press, Falmouth (Jamaica) Gazette, The Bat, York Herald, &c., have been received.

Medical Diary for the ensuing Week.

Monday, July 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, July 20.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, July 21.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, July 22.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, July 23.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 24.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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